Montana Fish, Wildlife & Parks

SPECIFICATIONS FOR WORK
SPECIAL PROVISIONS

Contents:

Appendices:

1. PROJECT DESCRIPTION

The Project involves construction work associated with:

Site Improvements, Causeway Fishing Access Site (FAS)
Fish, Wildlife & Parks (FWP) project # 7173612
Located in Lewis and Clark County, MT

The project generally includes site grading involving excavation and embankment, uncrushed subbase course placement, crushed base course placement, installation of prefabricated shelters and other site amenities, concrete footings, slabs, sidewalks, revegetation, and incidentals.

2. PROJECT RELATED CONTACTS

Project contacts are designated as follows:

Owner:
Montana FWP
1420 E. Sixth Ave.
PO Box 200701
Helena, MT 59620-0701

FWP Project Representative:
Bardell Mangum, PLA
Landscape Architect
Design and Construction
1522 9th Avenue
Helena, MT 59620
406-841-4012 (wk)
406-431-4062 (cell)
406-841-4004 (fax)

3. SITE INSPECTION

All Bidders should satisfy themselves as to the construction conditions by personal examination of the site described in this document. Bidders are encouraged to make any - investigations necessary to assess the nature of the construction and the difficulties to be encountered, see General Conditions, Article 3.

4. SOILS INFORMATION

Geotechnical investigation work has not been done for this Project. It is the responsibility of the Bidders to conduct all investigations and determine the soil type and digging conditions that may be encountered with this Project prior to bid preparation, see General Conditions, Article 3.

5. PROJECT REPRESENTATIVE, INSPECTIONS, AND TESTING

The Contractor's work will be periodically tested and observed to insure compliance with the Contract Documents. Complete payment will not be made until the Contractor has demonstrated that the work is complete and has been performed as required. If the Project Representative detects a discrepancy between the work and the requirements of the Contract Documents at any time, up to and including final inspection, such work will not be completely paid for until the Contractor has corrected the deficiency, see General Conditions, Article 9.

The Project Representative will periodically monitor the construction of work to determine if the work is being performed in accordance with the contract requirements. The Project Representative does not have the authority or means to control the Contractor's methods of construction. It is, therefore, the Contractor's responsibility to utilize all methods, equipment, personnel, and other means necessary to assure that the work is installed in compliance with the Drawings and Specifications, and laws and regulations applicable to the work. Any discrepancies noted shall be brought to the Contractor's attention, who shall immediately correct the discrepancy. Failure of the Project Representative to detect a discrepancy will not relieve the Contractor of his ultimate responsibility to perform the work as required, see General Conditions, Article 3.

The Contractor shall inspect the work as it is being performed. Any deviation from the Contract requirements shall be immediately corrected. Prior to any scheduled observation by the Project Representative, the Contractor shall again inspect the work and certify to the Project Representative that he has inspected the work and it meets the requirements of the Contract Documents. The Project Representative may require uncovering of work to verify the work was installed according to the contract documents, see General Conditions, Article 12.

The work will be subject to review by the Project Representative. The results of all such observations, and all contract administration, shall be directed to the Contractor only through the Project Representative.

5.1 Services Required by the Contractor. The Contractor shall provide the following services:

a. Any field surveys to establish locations, elevations, and alignments as stipulated on the Contract Documents. FWP reserves the right to set preliminary construction staking for the project. The Contractor is responsible to notify FWP for any construction staking discrepancies.

b. Preparation and certification of all required shop drawings and submittals as described in the General Conditions, Article 3.

c. All testing requiring the services of a laboratory to determine compliance with the Contract Documents shall be performed by an independent commercial testing laboratory acceptable to the Project Representative. The laboratory shall be staffed with experienced technicians properly equipped, and fully qualified to perform the tests in accordance with the specified standards.

d. Preparation and submittal of a construction schedule, including submittals, see General Conditions, Article 3. The schedule shall be updated as required, as defined in the Contract Documents.

e. All Quality Control testing as required by the Contractor's internal policies.

f. All Quality Assurance testing and/or re-testing as stated in the Contract Documents, see General Conditions, Article 13.

5.2 Services Provided by the Owner. The Owner shall provide the following services at no cost to the Contractor except as required for retests as defined in the Contract Documents.

a. The Project Representative may check compaction of backfill and surfacing courses using laboratory testing submittal information supplied by the Contractor. These tests are to determine if compaction requirements are being fulfilled in accordance with the Contract Documents. It is ultimately the responsibility of the Contractor to insure that this level of compaction is constant and met in all locations.

b. Any additional Quality Assurance testing deemed appropriate by the Owner, at the Owner's expense.

6. ENGINEERING INTERPRETATIONS

Timely Engineering decisions on construction activities or results have an important bearing on the Contractor's schedule. When engineering interpretation affects a plan design or specifications change, it should be realized that more than 24 hours may be required to gain the necessary Owner participation in the decision process including time for formal work directive, or change order preparation as required.

7. REJECTED WORK

Any defective work or nonconforming materials or equipment that may be discovered at any time prior to the expiration of the warranty period, shall be removed and replaced with work or materials conforming to the provisions of the Contract Documents, see General Conditions, Article 12. Failure on the part of the Project Representative to condemn or reject bad or inferior work, or to note nonconforming materials or equipment on the Contractors submittals, shall not be construed to imply acceptance of such work. The Owner shall reserve and retain all its rights and remedies at law against the Contractor and its Surety for correction of any and all latent defects discovered after the guarantee period (MCA 27-2-208).

Only the Project Representative will have the authority to reject work which does not conform to the Contract Documents.

8. UTILITIES

The exact locations of existing utilities that may conflict with the work are not precisely known. It shall be the Contractor's responsibility to contact the owners of the respective utilities and arrange for field location services. **One Call Locators, 1-800-424-5555**

The Contract Documents may show utility locations based on limited field observation and information provided to the Project Representative by others. **The Project Representative cannot guarantee their accuracy.** The Contractor shall immediately notify the Project Representative of any discrepancies with utility locations as shown on the Contract Drawings and/or their bury depths that may in any way affect the intent of construction as scoped in these specifications.

There will be no separate payment for exploratory excavation required to locate underground utilities.

8.1 Notification. The Contractor shall contact, in writing, all public and private utility companies that may have utilities encountered during excavation. The notification includes the following information:

a. The nature of the work that the Contractor will be performing.
b. The time, date and location that the Contractor will be performing work that may conflict with the utility.
c. The nature of work that the utility will be required to perform such as moving a power pole, supporting a pole or underground cable, etc.
d. Requests for field location and identification of utilities.

A copy of the letter of notification shall be provided to the Project Representative. During the course of construction, the Contractor shall keep the utility companies notified of any change in schedule, or nature of work that differs from the original notification.

8.2 Identification. All utilities that may conflict with the work shall be the Contractor's responsibility to locate before any excavation is performed. Field markings provided by the utility companies shall be preserved by the Contractor until actual excavation commences. All utility locations on the Drawings should be considered approximate and should be verified in the field by the Contractor. The Contractor shall also be responsible for locating all utilities that are not located on the Drawings.

Utilities are depicted on the Contract Documents in accordance with their achieved “Quality Levels,” as defined in the American Society of Civil Engineer’s Document, ASCE 38, “Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data.” Reliance upon these data for risk management purposes during bidding does not relieve the Contractor, or Utility Owner from following all applicable utility damage prevention statutes,

policies, and/or procedures during construction. It is important that the Contractor investigates and understands the scope of work between the project Owner and Engineer regarding scope of limits of the utility investigations leading to these utility depictions. Definitions of Quality Levels are described as follows:

a. "QUALITY LEVEL A" – (QLA): LOCATING THROUGH EXCAVATION. QLA data are highly accurate and are obtained by surveying an exposed utility. As such, both horizontal and vertical data are recorded. Survey accuracies are typically set at 15mm (1/2-inch) vertically, and to project survey standards horizontally (typically the same as for topography features), although these survey accuracies and precisions are generally left to the owner to specify in a scope of work. In addition to the applicable standard of care and any other additional standards imposed by commercial indemnity clauses, the accuracy of these location data is also typically guaranteed. Other data typically characterized include material type, surface elevation, utility size/capacity, outside dimensions, and configurations, soil type, and utility condition.

b. "QUALITY LEVEL B" – (QLB): DESIGNATING. QLB information is obtained through the application of appropriate surface geophysical methods to identify the existence and approximate horizontal location of utilities (a utility's "designation") within the project limits, followed by survey, mapping, and professional review of that designation. Underground utilities are identified by interpretation of received signals generated either actively or passively, and through correlating these received signals with visible objects (QLC) and record data (QLD) to determine function. Designated utilities that can't be identified are labeled as "unknowns." Although approximate has no accuracy associated with it, generally the locations are within inches rather than feet. The more utility congested the area or the deeper the utilities, the less likely it is that the designations will achieve that accuracy. These designations are then surveyed to project accuracies and precisions, typically third-order accuracy similar to other topography features. Note that surveying existing one-call marks does not lead to QLB data, since the genesis of the marks was not under the direct responsible charge of the professional certifying the QLB depictions, and one-call generally does not address unknown utilities, privately owned utilities, utilities without records, abandoned utilities, and so on. Nor does the professional have knowledge of the field technician's qualifications, training, and level of effort.

c. "QUALITY LEVEL C" – (QLC): SURFACE VISIBLE FEATURE SURVEY. QLC builds upon the QLD information by adding an independent detailed topography site survey for surface-visible appurtenances of subsurface utilities including but not limited to fire

hydrants, valves, risers, and manholes. Professional judgment is used to correlate the QLD data to the surveyed features, thus increasing the reliability of both utility location and existence. It is a function of the professional to determine when records and features do not agree and resolve discrepancies. This may be accomplished by depiction of a utility line at quality level D, effectively bypassing or disregarding (but still depicting) a surveyed structure of unknown origin. Additional resolution may result from consultation with utility owners.

d. "QUALITY LEVEL D" – (QLD): EXISTING RECORDS RESEARCH. QLD is the most basic level of information. Information is obtained from the review and documentation of existing utility records, verbal accounts, and/or one-call markings (to determine the existence of major active utilities and their approximate locations).

8.3 Removal or Relocation of Utilities. All electric power, street lighting, gas, telephone, and television utilities that require relocation will be the responsibility of the utility owner. A request for extending the specified contract time will be considered if utility owners cause delays.

8.4 Public Utilities. Water, sewer, storm drainage, and other utilities owned and operated by the public entities shall, unless otherwise specifically requested by the utility owner, be removed, relocated, supported or adjusted as required by the Contractor at the Contractor's expense. All such work shall be in accordance with these Contract Documents, or the Owner's Standard Specifications or written instructions when the work involved is not covered by these Specifications.

8.5 Other Utilities. Utilities owned and operated by private individuals, railroads, school districts, associations, or other entities not covered in these Special Provisions shall, unless otherwise specifically requested by the utility owner, be removed, relocated, supported or adjusted as required by the Contractor at the Contractor's expense. All work shall be in accordance with the utility owner's directions, or by methods recognized as being the standard of the industry when directions are not given by the owner of the utility.

8.6 Damage to Utilities and Private Property. The Contractor shall protect all utilities and private property and shall be solely responsible for any damage resulting from his construction activities. The Contractor shall hold the Owner and Project Representative harmless from all actions resulting from his failure to properly protect utilities and private property. All damage to utilities shall be repaired at the Contractor's expense to the full satisfaction of the owner of the damaged utility or property. The Contractor shall provide the Owner with a letter from the owner of the damaged utility or property stating that it has been repaired to the utility owner's full satisfaction.

8.7 Structures. The Contractor shall exercise every precaution to prevent damage to existing buildings or structures in the vicinity of his work. In the event of such damages, he shall repair them to the satisfaction of the owner of the damaged structure at no cost to the Owner.

8.8 Overhead Utilities. The Contractor shall use extreme caution to avoid a conflict, contact, or damage to overhead utilities, such as power lines, streetlights, telephone lines, television lines, poles, or other appurtenances during the course of construction of this project.

8.9 Buried Gas Lines. The Contractor shall provide some means of overhead support for buried gas lines exposed during trenching to prevent rupture in case of trench caving.

8.10 Pavement Removal. Where trench excavation or structure excavation requires the removal of curb and gutter, concrete sidewalks, or asphalt or concrete pavement, the pavement or concrete shall be cut in a straight line parallel to the edge of the excavation by use of a spade-bitted air hammer, concrete saw, colter wheel, or similar approved equipment to obtain a straight, square clean break. Pavement cuts shall be 2 feet wider than the actual trench opening.

8.11 Survey Markers and Monuments. The Contractor shall use every care and precaution to protect and not disturb any survey marker or monuments, such as those that might be located at lot or block corners, property pins, intersection of street monuments or addition line demarcation. Such protection includes markings with flagged high lath and close supervision. No monuments shall be disturbed without prior approval of the Project Representative. Any survey marker or monument disturbed by the Contractor during the construction of the project shall be replaced at no cost to the Owner by a licensed land surveyor.

8.12 Temporary Utilities. The Contractor shall provide all temporary electrical, lighting, telephone, heating, cooling, ventilating, water, sanitary, fire protection, and other utilities and services necessary for the performance of the work. All fees, charges, and other costs associated therewith shall be paid for by the Contractor.

9. CONSTRUCTION SAFETY

The Contractor shall be solely and completely responsible for conditions of the jobsite, including safety of all persons (including employees and subcontractors) and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. Safety provisions shall conform to U.S. Department of

Labor (OSHA), and all other applicable federal, state, county, and local laws, ordinances, codes, and regulations. Where any of these are in conflict, the more stringent requirement shall be followed. The Contractor's failure to thoroughly familiarize himself with the aforementioned safety provisions shall not relieve them from compliance with the obligations and penalties set forth therein, see General Conditions, Article 10.

10. CONSTRUCTION LIMITS AND AREAS OF DISTURBANCE

10.1 Construction Limits. Where construction easements or property lines, are not specifically called out on the Contract Documents, limit the construction disturbance to ten (10) feet, when measured from the edge of the slope stake grading, or to the adjacent property line, whichever is less. Disturbance and equipment access beyond this limit is not allowed without the written approval of both the Project Representative and the Owner of the affected property. If so approved, disturbance beyond construction limits shall meet all requirements imposed by the landowner; this includes existing roads used and/or improved as well as the construction of new access roads. Special construction, reclamation, or post-construction reclamation or other closure provisions required by the landowner on access roads beyond the construction limits shall be performed by the Contractor at no additional cost to the Owner.

10.2 Areas of Disturbances. Approved areas of disturbance are those areas disturbed by construction activities within the construction limits and along designated or approved access routes. Such areas may require reclamation and revegetation operations, including grading to the original contours, top soiling with salvaged or imported topsoil, seeding, fertilizing, and mulching as specified herein. Other areas that are disturbed by the Contractor's activities outside of the limits noted above will be considered as site damage or unapproved areas of disturbance, see General Conditions, Articles 3 and 10. This includes areas selected by the Contractor outside the defined construction limits for mobilization, offices, equipment, or material storage.

11. DECONTAMINATE CONSTRUCTION EQUIPMENT

Power wash all construction equipment entering the project site to prevent the spread of noxious weeds and aquatic invasive species. This applies to all FWP projects, whether or not individual construction permits specifically address cleaning of equipment.

12. TREE PROTECTION AND PRESERVATION

The Contractor and the Owner shall individually inspect all trees within the project construction limits prior to construction. The Owner shall determine which trees are to be removed and which trees are to be preserved. Construction of the grading, utilities and various roadway facilities must not significantly damage the trees root system or hinder it's chances for survival. Reasonable variations from the Contract Documents, as directed by the Project Representative, may be employed to ensure the survival of

trees.

13. CONSTRUCTION SURVEYS

The Contractor will be responsible for all layout and construction staking utilizing the Project Representative's existing control and coordinate data for the project. Dimensions and elevations indicated in layout of work shall be verified by the Contractor. Discrepancies between Drawings, Specifications, and existing conditions shall be referred to the Project Representative for adjustment before work is performed. The Project Representative may set location and grade stakes prior to construction; however, it is ultimately the responsibility of the Contractor to check and verify all construction staking for the project.

Existing survey control (horizontal and vertical) has been set for use in the design and ultimately the construction of these improvements. A listing of the coordinates and vertical elevation for each of these control points may be included in the project drawings.

The Contractor will be responsible for preserving and protecting the survey control until proper referencing by the Contractor has been completed. Any survey control obliterated, removed, or otherwise lost during construction will be replaced at the Contractor's expense.

Contractor shall be aware of property pins and survey monuments. Damage to these pins will require replacement of such by a registered land surveyor at no cost to the owner.

The Contractor shall provide construction staking from the Contractor's layouts and the control points. Contractor's construction staking includes at a minimum:

1. Slope stakes located at critical points as determined by the Project Representative.
2. Blue tops every longitudinally and transversely for subgrade and crushed base to verify finish grading of course.
3. Location and grade stakes for drainage features and retaining walls.
4. Location stakes for roadside safety items, permanent and temporary traffic control, and misc. items as determined by the Project Representative.

Original field notes, computations and other records take by the Contractor for the purpose of quantity and progress surveys shall be furnished promptly to the Project Representative and shall be used to the extent necessary in determining the proper amount of payment due to the Contractor.

14. MATERIAL SOURCES AND CONSTRUCTION WATER

The Contractor shall be responsible for locating all necessary material sources, including

aggregates, earthen borrow and water necessary to complete the work. The Contractor shall be responsible for meeting all transportation and environmental regulations as well as paying any royalties. The Contractor shall provide the Project Representative with written approvals of landowners from whom materials are to be obtained, prior to approval.

The Contractor may use materials from any source, providing the materials have been tested through representative samples and will meet the Specifications.

Water for compaction efforts shall be supplied by the Contractor.

14.1 Transportation of Structures and Materials Identified as Provided by Owner

14.1.1 Prefabricated Metal Shelters: Contractor shall be responsible for transportation to the project site from FWP Central Support Services Warehouse at 930 West Custer Avenue, Helena, MT 59602. Contact Jon Schafer, FWP Warehouse Manager, at (406) 495-3246 a minimum of 48 hours prior to anticipated pickup time to coordinate loading. FWP will have equipment to facilitate loading on Contractor truck and/or trailer.

14.1.2 2-Panel Kiosk, Wood Barrier Posts, Pedestal Grill and Sign Panels: FWP will transport these items to the project site. Contact Duke Short, FWP Region 4 FAS Maintenance Supervisor, at (406) 454-5856 5 days prior to anticipated need to schedule delivery.

15. MATERIALS SALVAGE AND DISPOSAL

Notify the Owner for any material salvaged from the project site not identified in the Contract Documents. The Owner reserves the right to maintain salvaged material at the project site, compensate the Contractor for relocation of salvaged material, or agreed compensation to Owner for material salvaged by the Contractor.

Haul and waste all waste material to a legal site and obey all state, county, and local disposal restrictions and regulations.

16. STORED MATERIALS

Contractor shall use an approved storage area for materials. Materials and/or equipment purchased by the Contractor may be compensated on a monthly basis. For compensation, provide the Project Representative invoices for said materials, shop drawings and/or submittals for approval, and applicable insurance coverage, see General Conditions, Article 9.

17. STAGING AND STOCKPILING AREA

Contractor shall use staging and stockpiling sites for to facilitate the project as approved by

the Owner. Contract Documents may show approved staging and stockpiling locations. Notify Owner within 24 hours for approval of staging and stockpiling sites not shown on the Contract Drawings.

18. SECURITY

The Contractor shall provide all security measures necessary to assure the protection of equipment, materials in storage, completed work, and the project in general.

19. CLEANUP

Cleanup for each item of work shall be fully completed and accepted before the item is considered final. If the Contractor fails to perform cleanup within a timely manner the Owner reserves the right to withhold final payment.

Review these Contract Documents for additional Final Cleanup specifications for specific measures, associated with Contractor responsibilities and final payment.

20. ACCESS DURING CONSTRUCTION

Provide access to all public and private roadways and approaches within the project throughout the construction period.

Provide emergency access at all times within the project throughout the construction period.

21. CONSTRUCTION TRAFFIC CONTROL

The Contractor is responsible for providing safe construction and work zones within the project limits by implementing the rules, regulations, and practices of the Manual on Uniform Traffic Control Devices, current edition.

22. SANITARY FACILITIES

Provide on-site toilet facilities for employees of Contractor and Sub-Contractors and maintain in a sanitary condition.

23. CONTRACT CLOSEOUT

The Contractor's Superintendent shall maintain at the project site, a "Record Set of Drawings" showing field changes, as-built elevations, unusual conditions encountered during construction, and such other data as required to provide the Owner with an accurate "as constructed" set of record drawings. The Contractor shall furnish the "Record Set" to the Project Representative following the Final Inspection of the Project.

The Contractor's final payment will not be processed until the "Record Set" of drawings are

received and approved by the Project Representative.

24. MEASUREMENT AND PAYMENT

Review these Contract Documents for additional Measurement and Payment specifications for definitions. Quantities are listed on the Bid Proposal for Payment Items. Additional material quantities, volumes, and measurements may be shown on the Contract Document drawings and/or specifications.

Unit Price quantities and measurements shown on the Bid Proposal are for bidding and contract purpose only. Quantities and measurements supplied, completed for the project, and verified by the Project Representative shall determine payment. Each unit price will be deemed to include an amount considered by the Contractor to be adequate to cover Contractor's overhead and profit for each bid item.

The Owner or Contractor may make a Claim for an adjustment in Contract Unit Price if the quantity of any item of Unit Price Work performed by the Contractor differs materially and/or significantly (increase or decrease by 50%) from the estimated quantity indicated on the Bid Proposal.

Lump sum bid item quantities will not be measured. Payment for these lump sum bid proposal items will be paid in full amount listed on the Bid Proposal when accepted by the Project Representative, unless specified otherwise.

SUPERIOR
RECREATIONAL PRODUCTS

QUO0120131B
8' x 8’ (AS) Mini Structure
4:12 Roof Pitch
24 Ga. R Panel Metal Roof

QUO0120131 - 8' x 8' (AS) Mini Gable Structure QTY: 1

4:12 Pitch

CALLOUT	PART NUMBER	DESCRIPTION					
		Type	H	W	Thk	Length	QTY
C1		Column Assembly	5	5	3/16	144 3/8	2
RF1		Rafter	5	5	1/8	48	4
RB1/P1		Ridge Beam/Purlin	4	4	1/8	55	3
RB2/P2		Ridge Beam Stub/Purlin Stub	4	4	1/8	15 1/2	6
BRK1		Bench Bracket	20 1/16	1 1/2		39 1/8	2
	FAB-21829XX	Webcoat Custom Bench Seat/Back 2" x 10" x 72"					4

CALLOUT	PART NUMBER	DESCRIPTION	QTY
		HARDWARE:	
	HWB0173	Bolt 3/4"-10 x 2-1/2" FTHH A325	34
	HWWR0055	Washer 3/4" ID x OD x thick Flat F436	34
	HWB0499	Bolt 5/8"-11 x 7" Grade #5, Zinc	5
	HWWR0120	Washer 5/8" ID USS Flat Zinc	9
	HWN0165	Nut 5/8"-11 Nylock Zn	5
	HWB0294	Bolt 3/8"-16 x 2" HH SS	17
	HWWR0092	Washer 3/8" ID x 1-1/4" OD x 0.12 thick Flat SS	33
	HWN0098	Nut 3/8"- Nylock 300 S/S	17

CALLOUT	PART NUMBER	DESCRIPTION	QTY
		PRE-CUT METAL ROOF:	
	RMMR00001	24ga. R-Panel 36” Wide	6
	RMMR00094	Eave Trim for 90 Degrees x 10’-3” (4-90ET)	4
	RMMR0058	Panel Cover - 24ga x 10’-3”lg (7-90PC)	4
	RMMR00081	Zee trim for R-Panel x 10’-3”	2
	RMMR00008	Ridge Trim 4:12 Roof Pitch x 10’-3” (1-412RT)	1
	HWS0044	Screw #12-14 x 1-1/4" Self Drill Tek 4.5 Impax	100
	HWS0072	Screw 1/4"-#14 x 7/8" Lap/Tek Self Driller w/ Washer	100
	HWM0173	Rivet 43D Pop	100
	HWM0472	Tape, Sealant - 3/32" x 1" x 45' Roll - Gray (For Metal Roof)	1
	RMMR00119	Touchup 1.7 oz. Applicator Pen Kynar ADS	1
	TouchUp	Touch-Up Paint [Frame Color] (Cans)	1

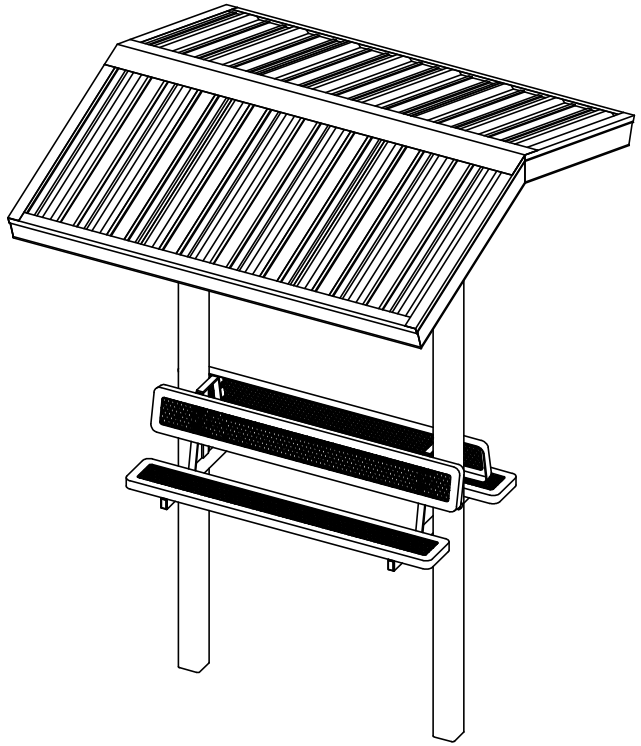
FRAME COLOR	T.B.D. BY CUSTOMER
FRAME COLOR	T.B.D. BY CUSTOMER

Material Specifications and Notes:
1. All structural steel tubing shall be ASTM A-500 Grade B-C
2. All other steel (plates, gussets, etc.) shall be ASTM A-36.
3. All welding is to be done in accordance with the latest AWS standards.
4. Standard bolts to be ASTM A-325 & threaded rod to be ASTM B-7 unless otherwise noted.
5. All fabricated steel & structural tubes are blasted to a near-white condition prior to application of primer and top coat.
-Primer: Zinc Rich
-Top coat: TGIC powder coating
6. Metal roofing shall be pre-cut 24ga. x 1 1/4" dp x 36" wide, Fy =50ksi steel panels.

Erection Notes:
All members must be properly braced until the complete structural system has been constructed. Bracing material and method is the responsibility of the G.C.

This building has been designed as a free standing, open structure. If walls or other modifications are to be made, the structure must be be re-engineered prior to these modifications.

N.I.C. = NOT IN CONTRACT
G.C. = GENERAL CONTRACTOR



QUO0120131B
8' x 8' (AS) Gable End Shelter
7'-6" Eave Height
4:12 Pitch

Table of Contents

Engineering
An engineering seal and signature, if present, is limited to the design and material provided by SUPERIOR RECREATIONAL PRODUCTS. It DOES NOT represent the Engineer of Record in any manner

SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:

Rev Date & Description:

Date: 5/23/2017

Drawn By: DEB

Superior Recreational Products

1050 Columbia Drive, Carrollton GA 30117
Toll Free: 800-327-8774 Local: 770-832-6660

Description: General Specs and Notes

Material:

Rev: **xx**

Drawing Number: QUO0120131

Weight: **lbs.**

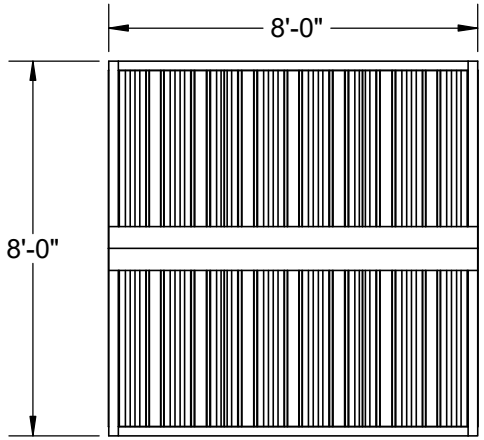
Size: A

Units: Inch

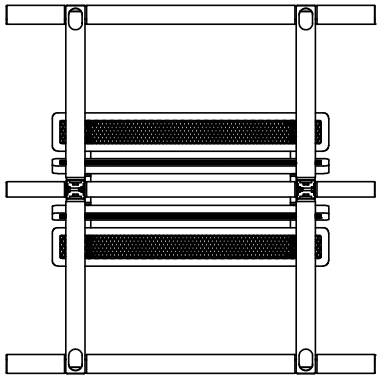
Tol: ±.0625 Unless Otherwise Specified

Scale: **NTS**

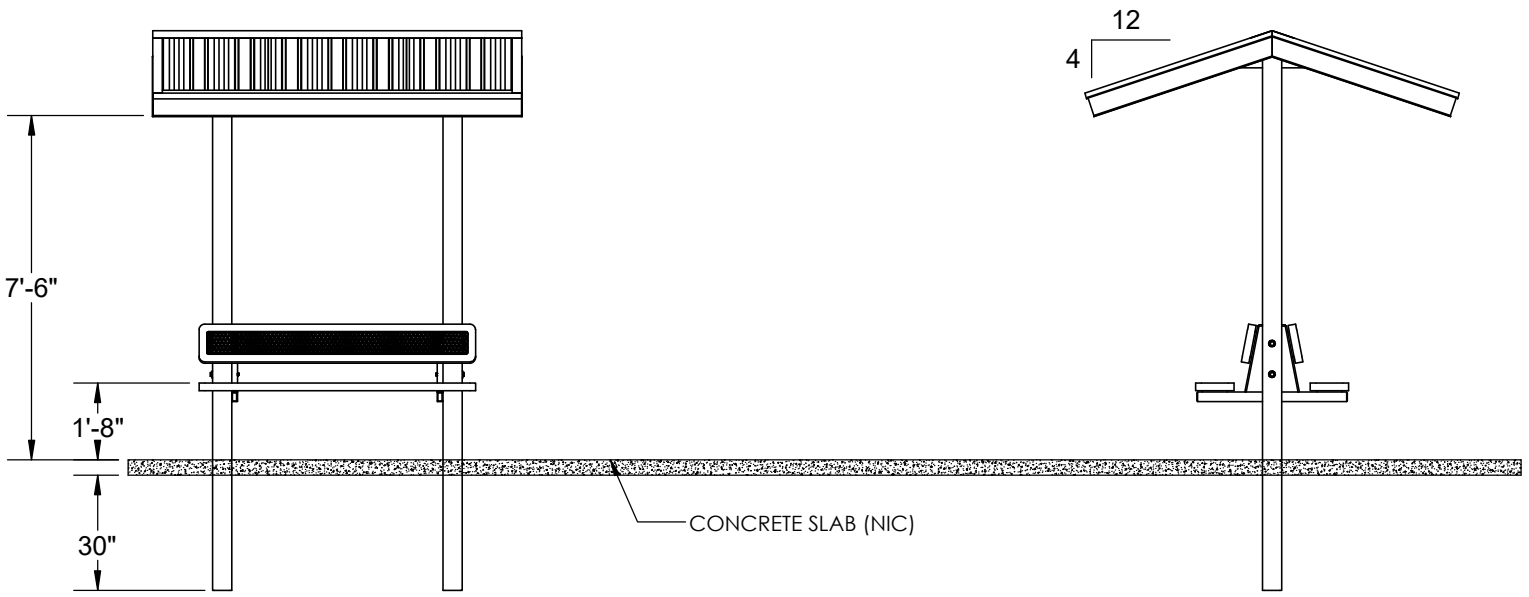
Sheet: 1 of 11



Top View



Top View (Frame Only)



Front View

Side View

SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:

Rev Date & Description:

Date: 5/23/2017

Drawn By: DEB

Superior Recreational Products

1050 Columbia Drive, Carrollton GA 30117
Toll Free: 800-327-8774 Local: 770-832-6660

Description: Primary Structural Views

Material:

Rev: **xx**

Drawing Number: QUO0120131

Weight: **lbs.**

Size: A

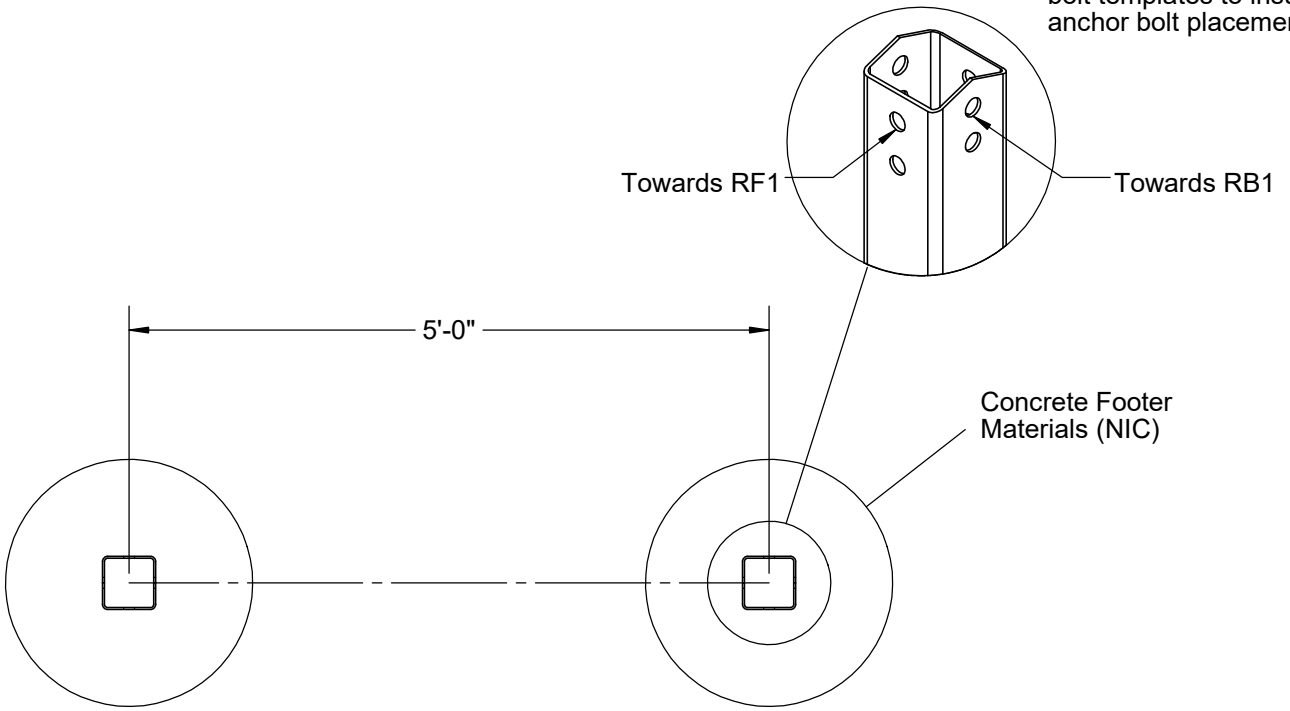
Units: Inch

Tol: ±.0625 Unless Otherwise Specified

Scale: **NTS**

Sheet: 2 of 11

Footing Layout Notes:
Superior Recreational Products strongly recommends the use of provided anchor bolt templates to insure accuracy of anchor bolt placements.



SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:

Rev Date & Description:

Date: 5/23/2017

Drawn By: DEB

Superior Recreational Products

1050 Columbia Drive, Carrollton GA 30117
Toll Free: 800-327-8774 Local: 770-832-6660

Description: Ground Plan Layout

Material:

Rev: **xx**

Drawing Number: QUO0120131

Weight: **lbs.**

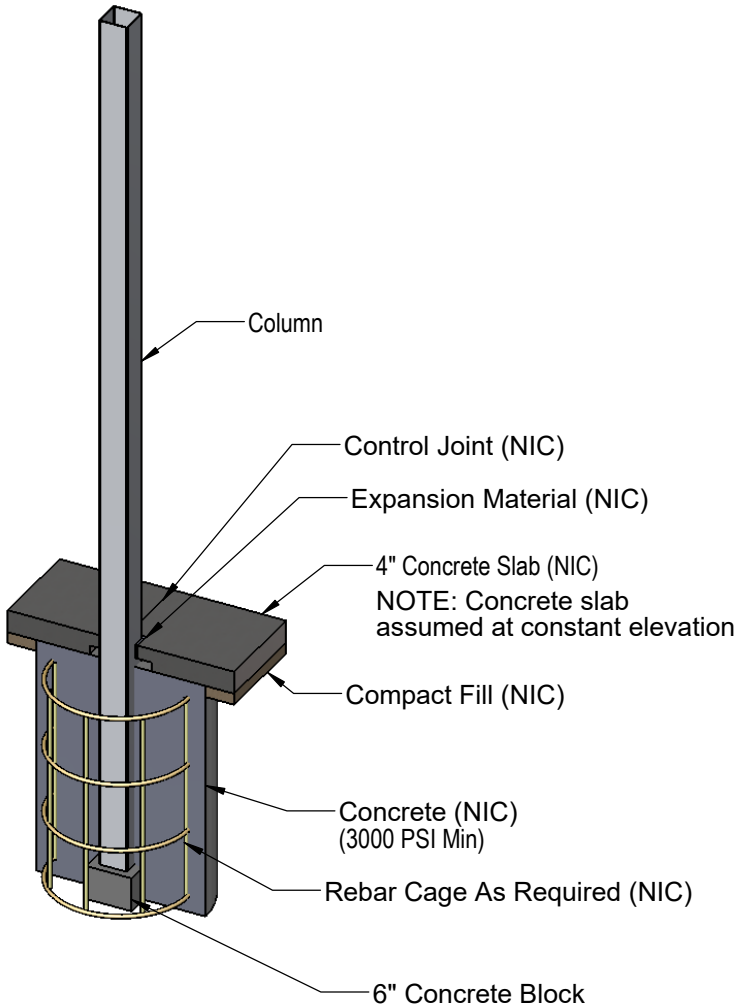
Size: A

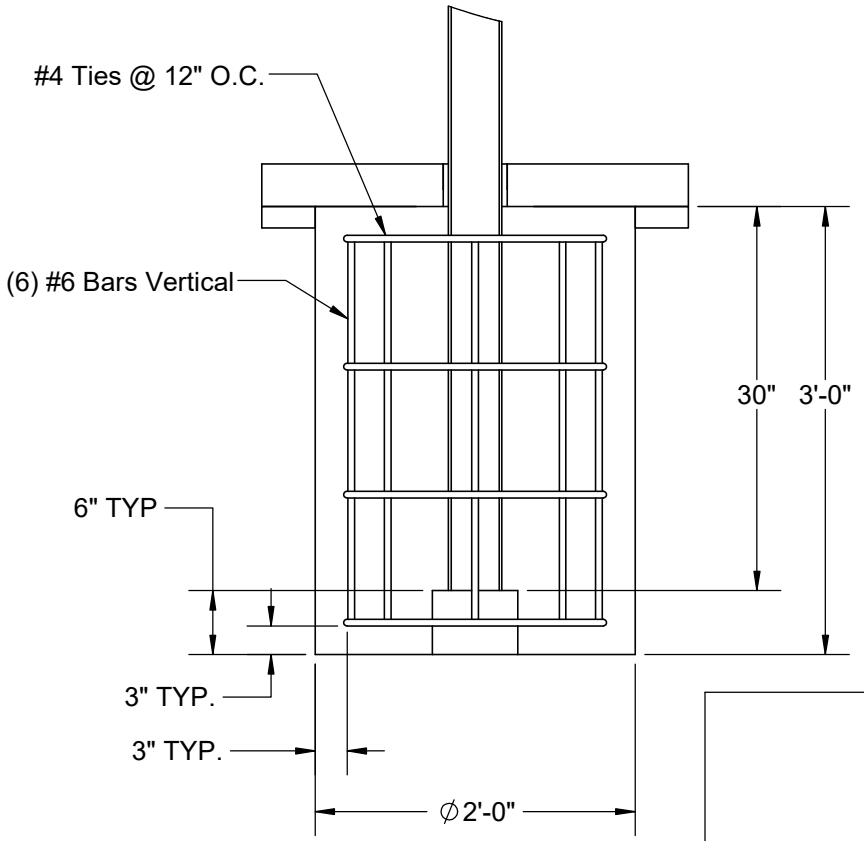
Units: Inch

Tol: ±.0625 Unless Otherwise Specified

Scale: **NTS**

Sheet: 3 of 11





TYPICAL FOOTER
REPRESENTATION ONLY.
SEE SEALED CALCULATIONS
FOR FOOTER DETAILS.

SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:

Rev Date & Description:

Date: 5/23/2017

Drawn By: DEB

Superior Recreational Products

1050 Columbia Drive, Carrollton GA 30117
Toll Free: 800-327-8774 Local: 770-832-6660

Description: Footer/Anchor Illustration

Material:

Rev: XX

Drawing Number: QUO0120131

Weight: lbs.

Size: A

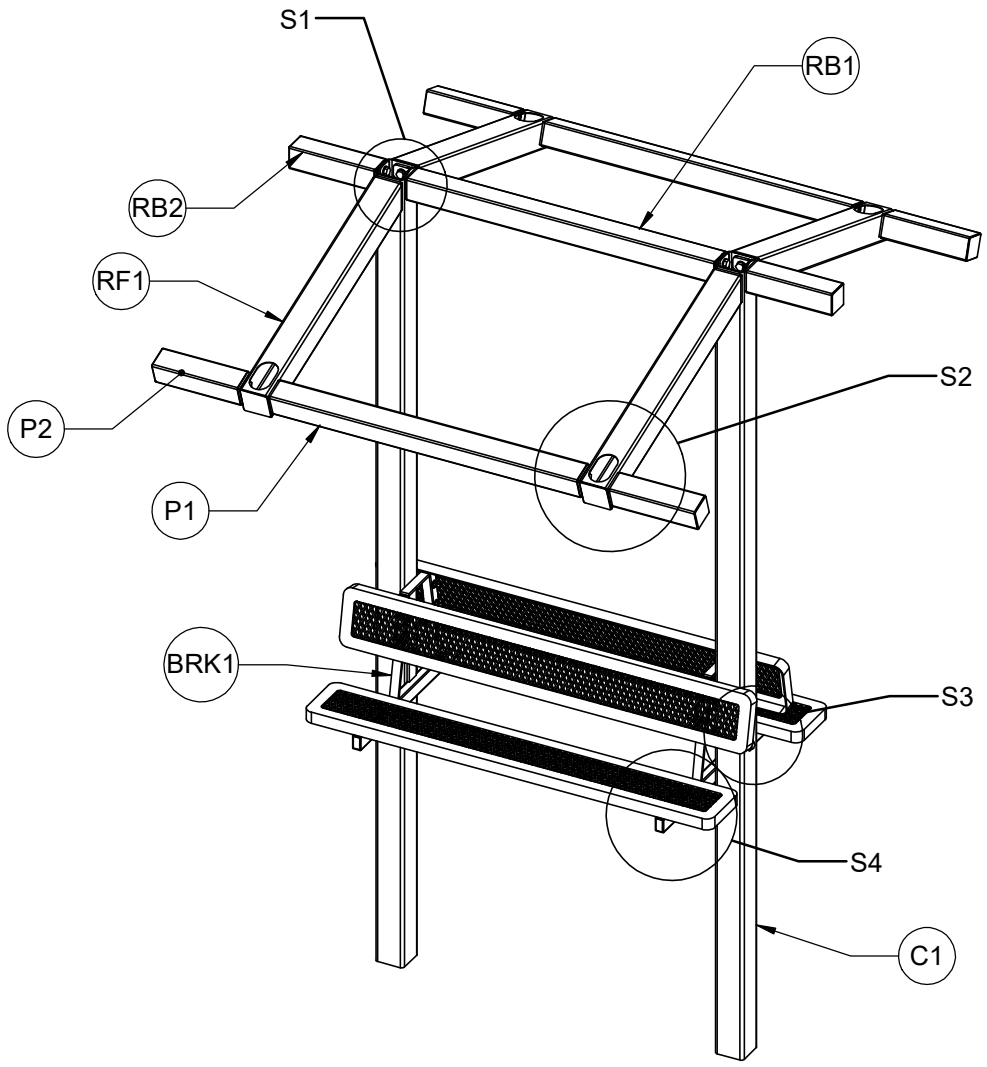
Units: Inch

Tol: ±.0625 Unless Otherwise Specified

Scale: NTS

Sheet: 4 of 11

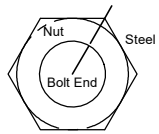
Plate Location	Plate Thickness
Column / Ridge Beam	3/8"
Column/Rafter	5/8"
Purlin/Rafter	3/8"



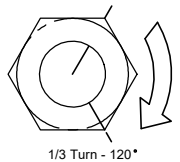
Tightening Method for Snug-Tightened Joints

1. All bolt holes shall be aligned to permit insertion of the bolts without undue damage to the threads.
2. Bolts shall be placed in all holes with washers positioned as required.
3. Snug-tighten to bolts in the joint.
4. Match-mark the nut and protruding end of the bolt.
5. Rotate the nut 1/3 turn past snug-tight.

Matchmarking



Required Turns



*See AISC "Specification for Structural Joints Using ASTM A325 or A490 Bolts" for complete details.

NOTE: NUTS ARE PRE-WELDED TO THE INSIDE OF HIP BEAM / PURLIN / COLUMN END PLATES.

SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:

Rev Date & Description:

Date: 5/23/2017

Drawn By: DEB

Superior Recreational Products

1050 Columbia Drive, Carrollton GA 30117
Toll Free: 800-327-8774 Local: 770-832-6660

Description: Member/Connection Callouts

Material:

Rev: **xx**

Drawing Number: QUO0120131

Weight: **lbs.**

Size: A

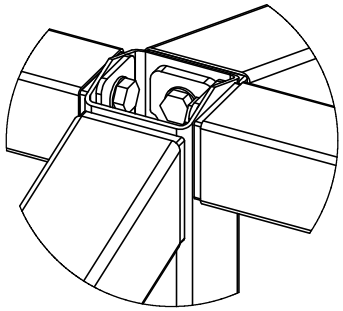
Units: Inch

Tol: ±.0625 Unless Otherwise Specified

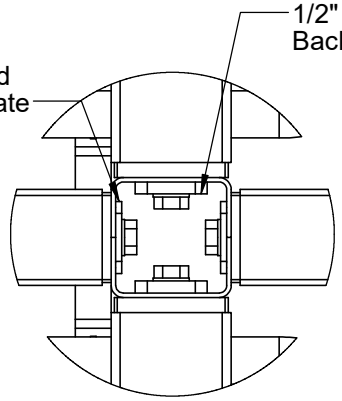
Scale: **NTS**

Sheet: 5 of 11

CONNECTION (S1)
(2) PLACES
FASTENERS USED @ EACH CONNECTION
(8) Bolt 3/4"-10 x 2 1/2" A325 Plain
(8) Washer 3/4" ID x 1 1/2" OD x thick Flat F436

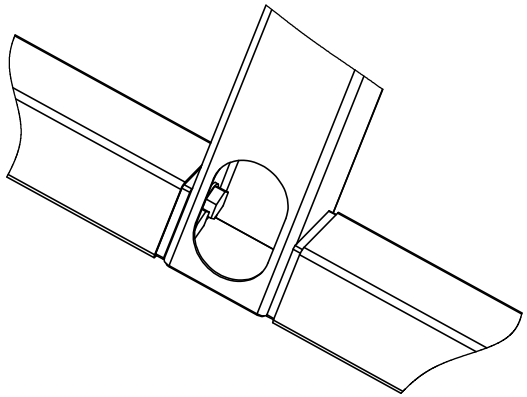


CONNECTION VIEW

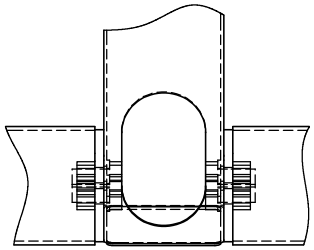


TOP VIEW

CONNECTION (S2)
(4) PLACES
FASTENERS USED @ EACH CONNECTION
(4) Bolt 3/4"-10 x 2 1/2" A325 Plain
(4) Washer 3/4" ID x 1 1/2" OD x thick Flat F436

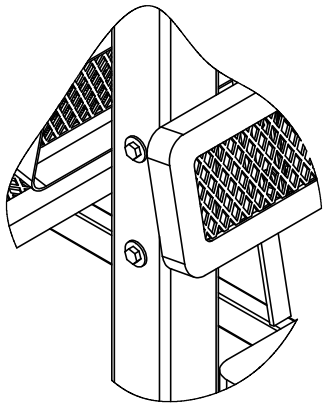


CONNECTION VIEW

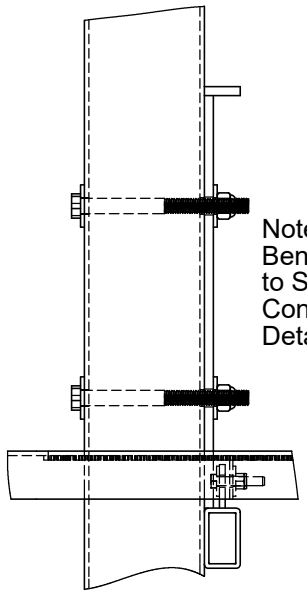


TOP VIEW

CONNECTION (S3)
(2) PLACES
FASTENERS USED @ EACH CONNECTION
(2)Bolt 5/8"-11 x 7" Grade #5, Zinc
(4)Washer 5/8" ID USS Flat Zinc
(2)Nut 5/8"-11 Nylock Zn

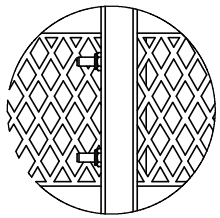


CONNECTION VIEW

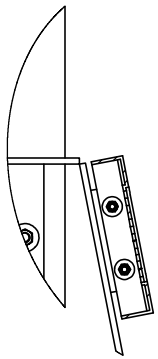


REAR VIEW

CONNECTION (S4)
(8) PLACES
FASTENERS USED @ EACH CONNECTION
(2)Bolt 3/8"-16 x 2" HH SS
(4)Washer 3/8" ID x 1-1/4" OD x 0.12 thick Flat SS
(2)Nut 3/8"- Nylock 300 S/S



CONNECTION VIEW



SIDE VIEW

SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:

Rev Date & Description:

Date: 5/23/2017

Drawn By: DEB

Superior Recreational Products

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Toll Free: 800-327-8774 Local: 770-832-6660

Description: Conections Details

Material:

Rev: **xx**

Drawing Number: QUO0120131

Weight: **lbs.**

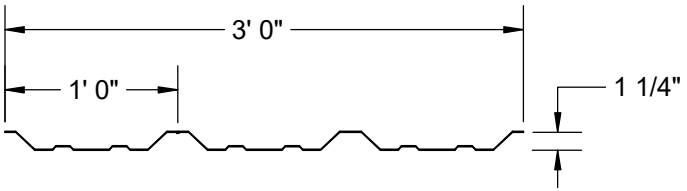
Size: A

Units: Inch

Tol: ±.0625 Unless Otherwise Specified

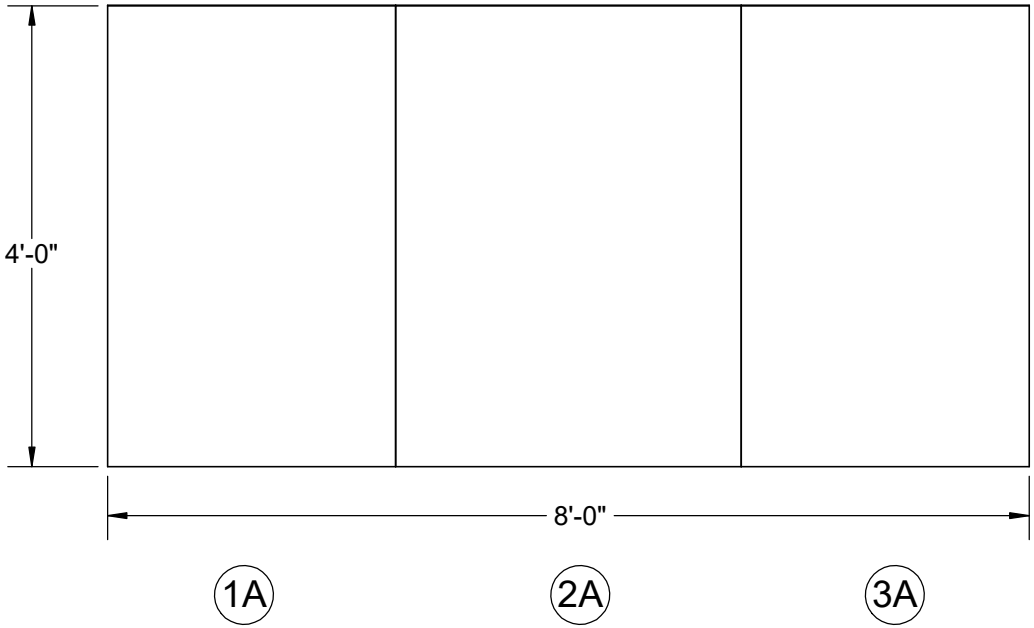
Scale: **NTS**

Sheet: 6 of 11



24ga. R-Panel Profile

Note: Two of Every Panel Unless Otherwise Specified



SUPERIOR RECREATIONAL PRODUCTS	Rev Date & Description:		**Superior Recreational Products**	Description: Roof Panel Layout					
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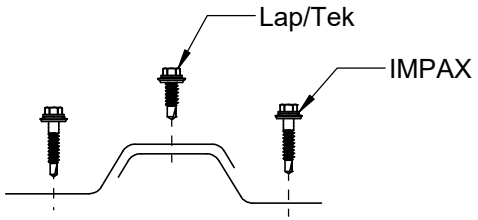
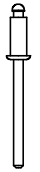
	Date: 5/23/2017	Drawn By: DEB	**1050 Columbia Drive, Carrollton GA 30117** **Toll Free: 800-327-8774 Local: 770-832-6660**	Weight: lbs.	Size: A	Units: Inch	Tol: ±.0625 Unless Otherwise Specified	Scale: NTS	Sheet: 7 of 11



Rib Overlap Detail

1-1/4" IMPAX SCREWS (Roof Panels -to- Structural Steel)

Screw 1/4"-#14 x 7/8" Lap/Tek Self Driller w/ Washer



Pop Rivet 43D

Correct Tightening Methods

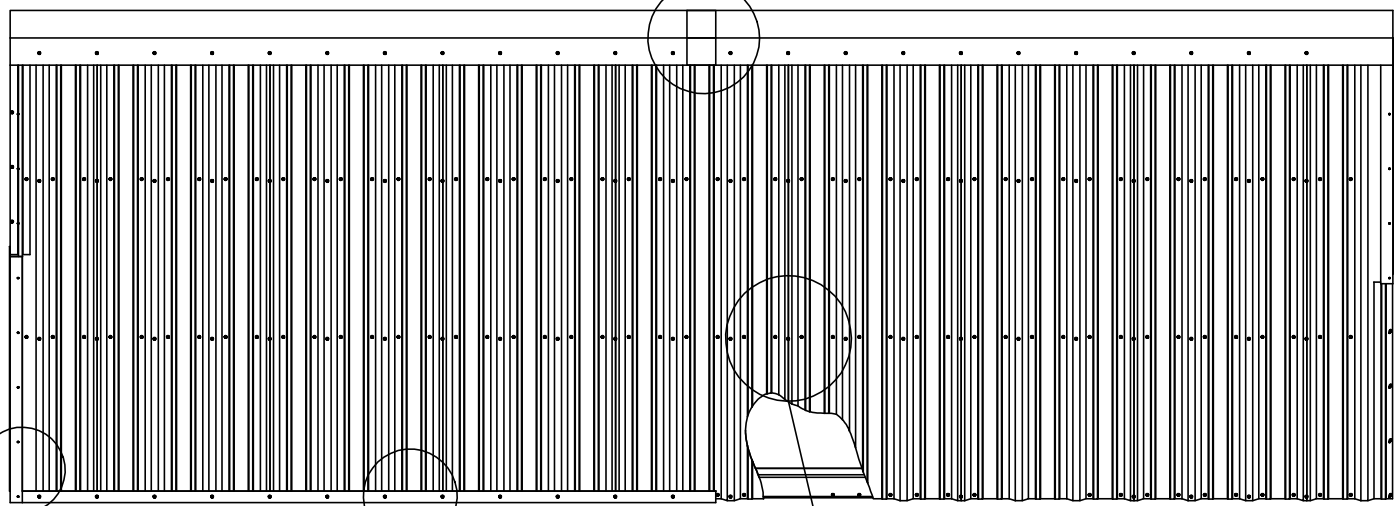
CORRECT

TOO LOOSE

TOO TIGHT

Ridge Location

Note: Screws for Three Purlins Shown. Actual Number of Purlins May Vary.

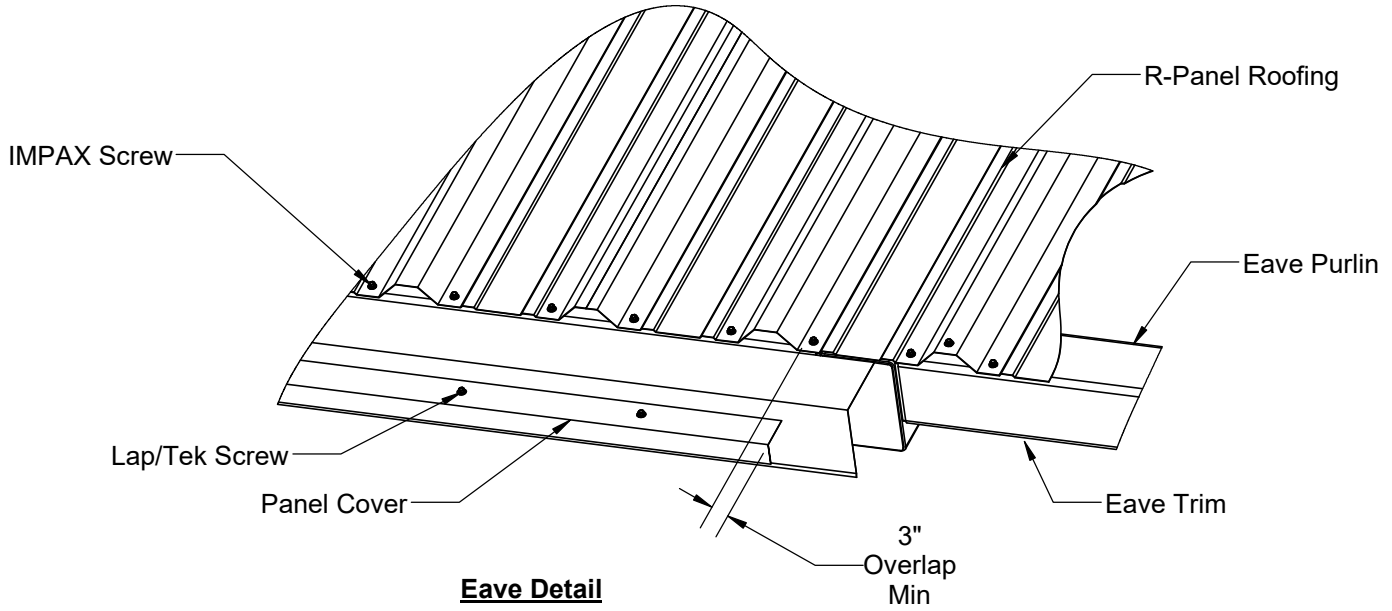


Rake Location

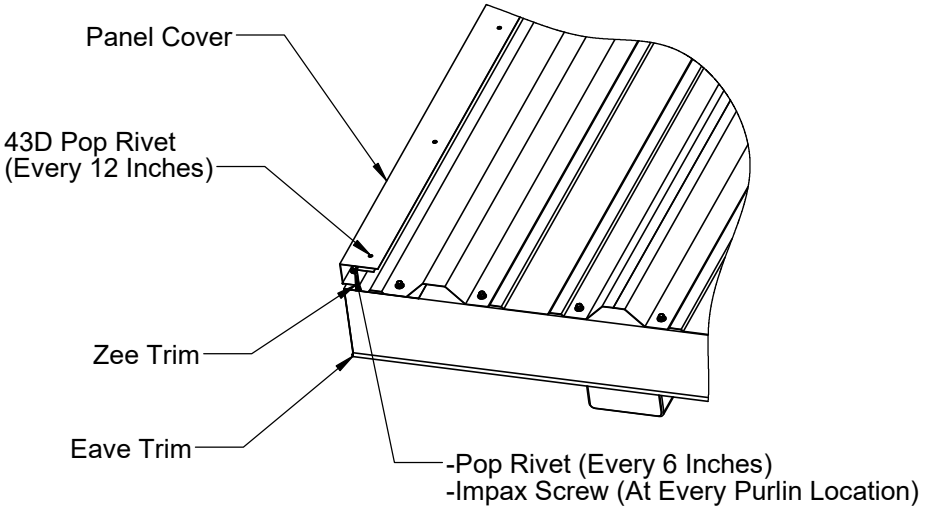
Eave Location

Purlin Location

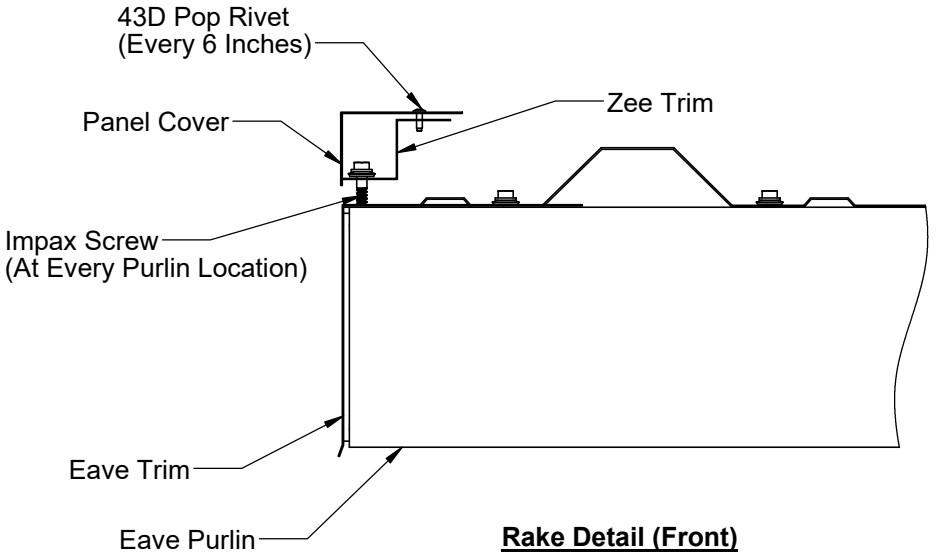
SUPERIOR RECREATIONAL PRODUCTS	Rev Date & Description:		**Superior Recreational Products**	Description: ROOF SCREW SCHEDULE				
	Rev Date & Description:			Material:	Rev: xx	Drawing Number: QUO0120131		
	Date: 5/23/2017	Drawn By: DEB	**1050 Columbia Drive, Carrollton GA 30117 Toll Free: 800-327-8774 Local: 770-832-6660**	Weight: lbs.	Size: A	Units: Inch	Tol: ±.0625 Unless Otherwise Specified	Scale: 1:40	Sheet: 8 of 11



Eave Detail



Rake Detail (Top)



Rake Detail (Front)

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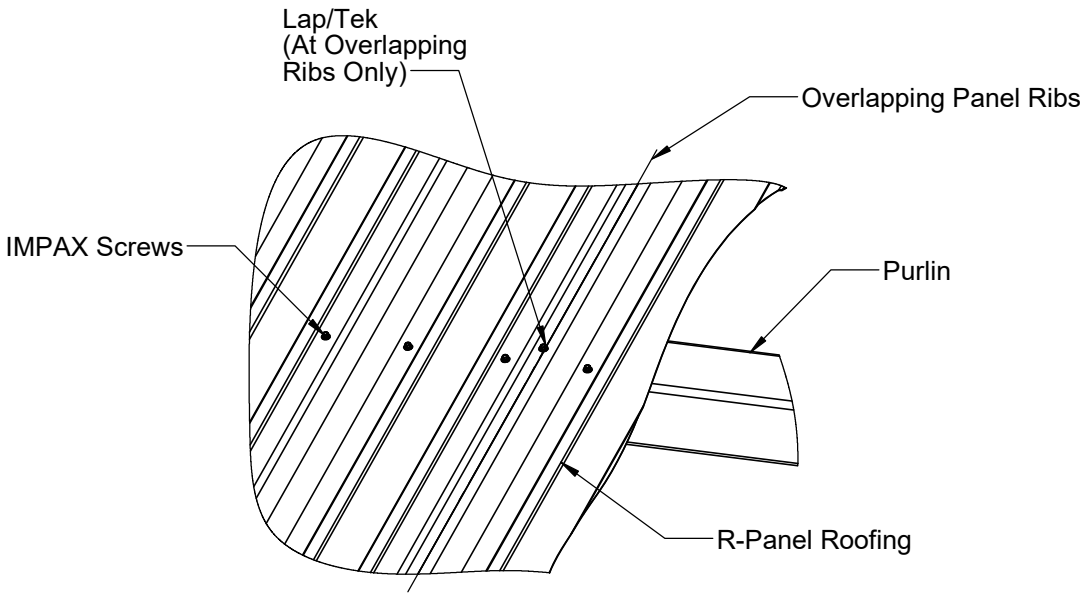
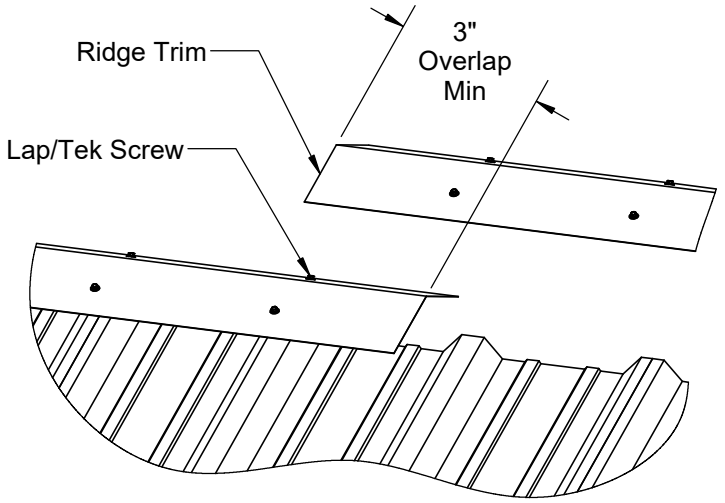
	Date: 5/23/2017 / Drawn By: DEB	**1050 Columbia Drive, Carrollton GA 30117** **Toll Free: 800-327-8774 Local: 770-832-6660**	Weight: **lbs.**	Size: A	Units: Inch	Tol: ±.0625 Unless Otherwise Specified	Scale: **1:40**	Sheet: 9 of 11



Purlin Detail



Ridge Detail

SUPERIOR RECREATIONAL PRODUCTS

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Date: 5/23/2017

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Superior Recreational Products

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Description: Purlin/Ridge Detail

Material:

Rev: **xx**

Drawing Number: QUO0120131

Weight: **lbs.**

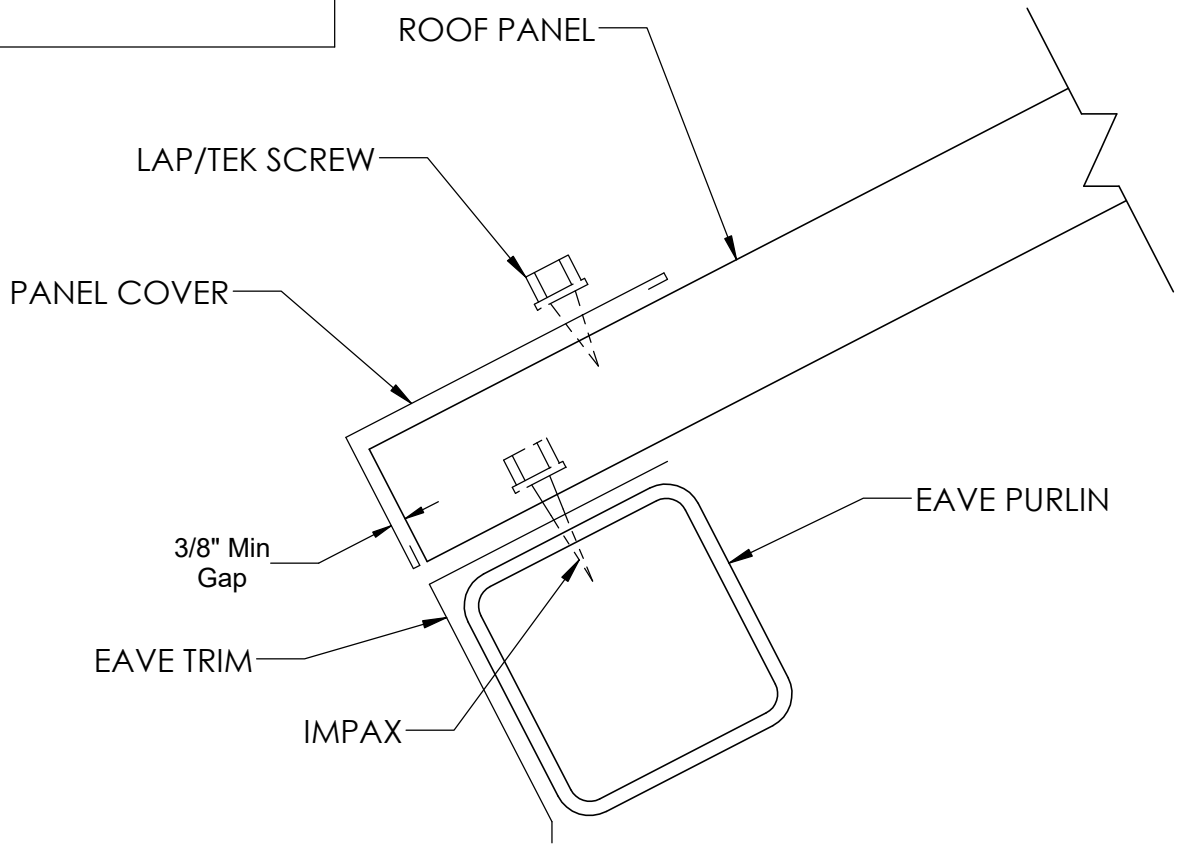
Size: A

Units: Inch

Tol: ±.0625 Unless Otherwise Specified

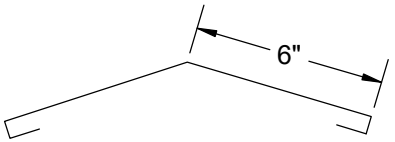
Scale: **1:96**

Sheet: 10 of 11

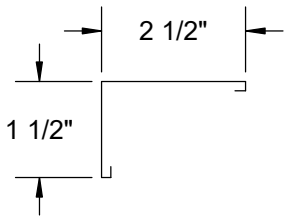


Eave Section Detail

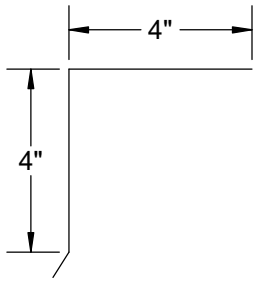
TRIM PROFILES



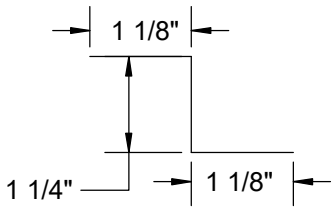
RIDGE TRIM



PANEL COVER



EAVE TRIM



Z-TRIM

SUPERIOR RECREATIONAL PRODUCTS	Rev Date & Description:		**Superior Recreational Products**	Description: Section Detail				
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	Date: 5/23/2017	Drawn By: DEB	**1050 Columbia Drive, Carrollton GA 30117 Toll Free: 800-327-8774 Local: 770-832-6660**	Weight: lbs.	Size: A	Units: Inch	Tol: ±.0625 Unless Otherwise Specified	Scale: 1:1	Sheet: 11 of 11

SUPERIOR
RECREATIONAL PRODUCTS

QUO0120131
4S16-AS
16' (AS) Square Shelter
4:12 Roof Pitch
24 Ga. R Panel Metal Roof

QUO0120131 16’ (AS) Square Structure; 4:12 Pitch; 7’-6” EH | Qty Ordered | 1

Roof pitch: 4:12 Eave height: 7'-6" Roof Type: 24Ga. R Panel Metal Roof

CALLOUT	PART NUMBER	DESCRIPTION					
		Type	H	W	Thk	Length	QTY
CR1		Compression Ring					1
C1		Column Assembly	5	5	1/8	99 15/16	4
HB1		Hip Beam Assembly	5	5	1/8	135 13/16	4
P1		Purlin Assembly	4	4	1/8	91 3/8	4
P2		Purlin Assembly	4	4	1/8	183 7/16	4

Hardware			
CALLOUT	PART NUMBER	DESCRIPTION	QTY
	HWB0168	Bolt 3/4"-10 x 2" HH A325	51
	HWB0166	Bolt 3/4"-10 x 1-3/4" A325 Plain	51

Roof			
CALLOUT	PART NUMBER	DESCRIPTION	QTY
	RMMR00001	24ga. R-Panel 36" Wide	24
		ROOF CAP	1
	RMMR00018	Hip Trim 4:12 Roof Pitch for a Square x 10'-3" (2-412HT-S)	6
	RMMR00058	Panel Cover for 90 degrees x 10'-3" (7-90PC)	8
	RMMR00047	Eave Trim for 90 degrees x 10'-3" (5-90ET)	8
	HWS0044	Screw #12-14 x 1-1/4" Self Drill Tek 4.5 Impax	400
	HWS0072	Screw 1/4"-#14 x 7/8" Lap/Tek Self Driller w/ Washer	200

	RMMR00119	Touchup 1.7 oz. Applicator Pen Kynar ADS (Roof Color)	1
	TouchUp	Touch-Up Paint [Frame Color] (Cans)	1

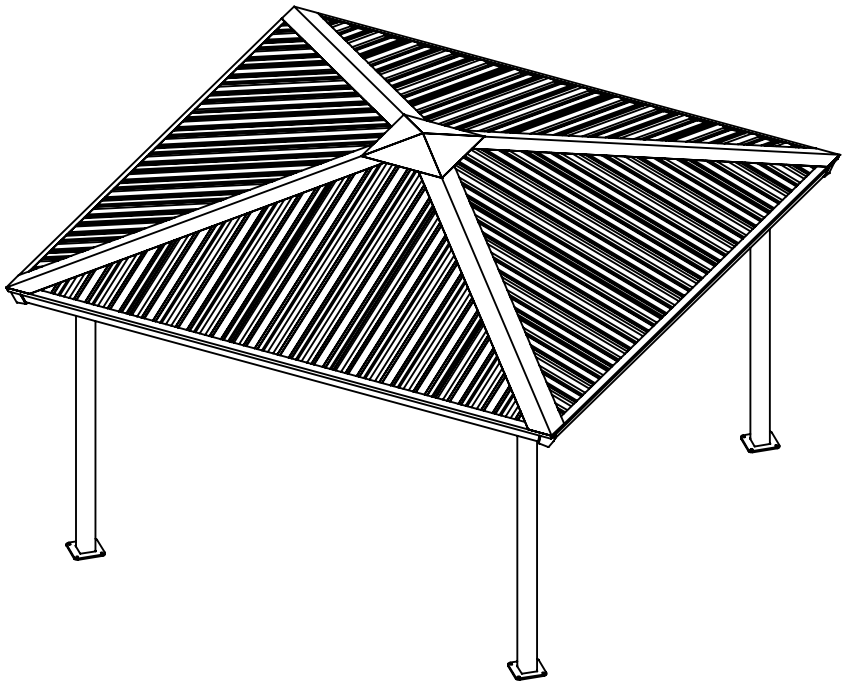
		ANCHORING HARDWARE:					QTY
			W	D	Thk	Hole Size	
		Anchor Bolt Template	10	10	1/8	9/16	4
	HWA0048	Anchor ASTM F1554 GR36 1/2"-13 x 16" w/ tack welded nut					16
	HWWR0019	Washer 1/2" Flat F436					32
	HWN0045	Nut 1/2"-13 A563 Hex					32
			FRAME COLOR :		T.B.D. BY CUSTOMER		
			ROOF COLOR :		T.B.D. BY CUSTOMER		

Material Specifications and Notes:
1. All structural steel tubing shall be ASTM A-500 Grade B-C
2. All other steel (plates, gussets, etc.) shall be ASTM A-36.
3. All welding is to be done in accordance with the latest AWS standards.
4. Standard bolts to be ASTM A-325 & threaded rod to be ASTM B-7 unless otherwise noted.
5. All fabricated steel & structural tubes are blasted to a near-white condition prior to application of primer and top coat.
   -Primer: Zinc Rich
   -Top coat: TGIC powder coating
6. Metal roofing shall be pre-cut 24ga. x 1 1/4" dp x 36" wide, Fy =50ksi steel panels.

Erection Notes:
All members must be properly braced until the complete structural system has been constructed. Bracing material and method is the responsibility of the G.C.

This building has been designed as a free standing, open structure. If walls or other modifications are to be made, the structure must be be re-engineered prior to these modifications.

N.I.C. = NOT IN CONTRACT
G.C. = GENERAL CONTRACTOR



Model #: 4S16-AS
16' (AS) Square Shelter
7'-6" Eave Height
4:12 Pitch

Table of Contents

Design Criteria
Refer to sealed calculations.

Engineering
An engineering seal and signature, if present, is limited to the design and material provided by SUPERIOR RECREATIONAL PRODUCTS. It DOES NOT represent the Engineer of Record in any manner

SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:

Rev Date & Description:

Date: 4/29/2014

Drawn By: DEB

Superior Recreational Products

1050 Columbia Drive, Carrollton GA 30117
Toll Free: 800-327-8774 Local: 770-832-6660

Description: General Specs and Notes

Material:

Rev: **XX**

Drawing Number: 4S16-AS

Weight: **lbs.**

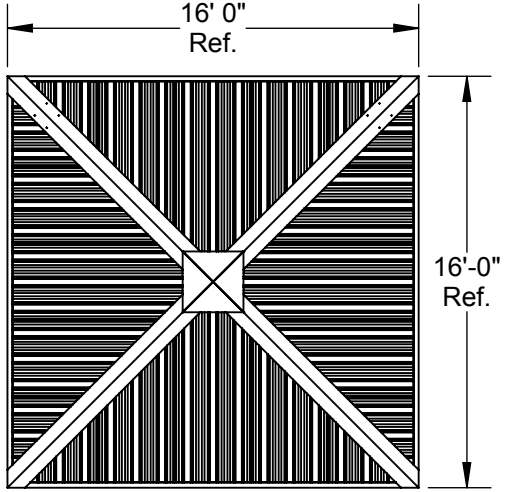
Size: A

Units: Inch

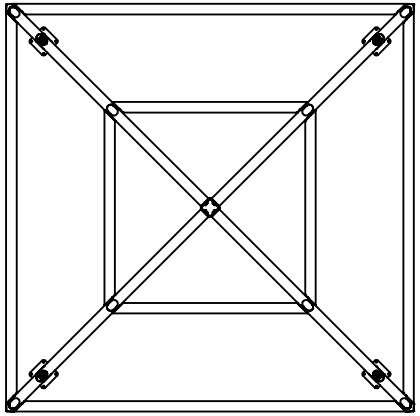
Tol: ±.0625 Unless Otherwise Specified

Scale: **NTS**

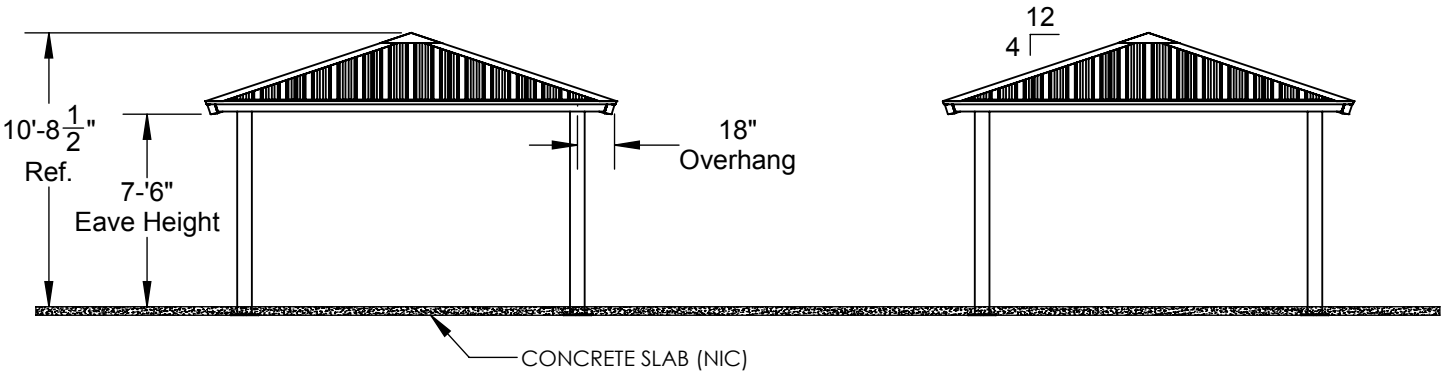
Sheet: 1 of 11



Top View



Top View (Frame Only)



Front View

Side View

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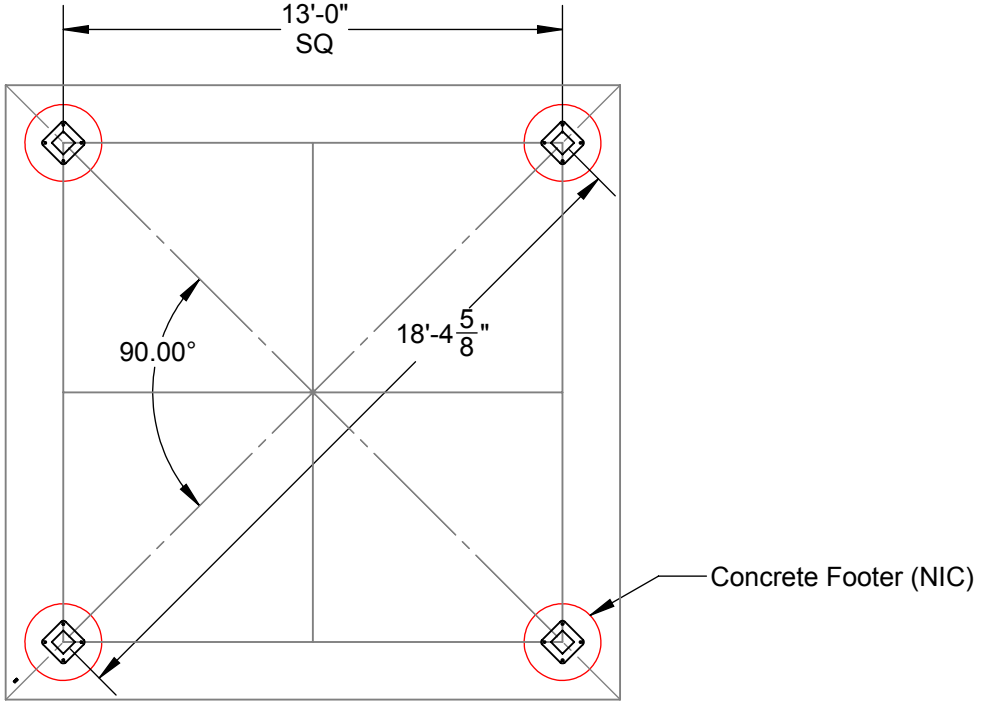
	Date: 4/29/2014	Drawn By: DEB	**1050 Columbia Drive, Carrollton GA 30117** **Toll Free: 800-327-8774 Local: 770-832-6660**	Weight: lbs.	Size: A	Units: Inch	Tol: ±.0625 Unless Otherwise Specified	Scale: NTS	Sheet: 2 of 11

Footing Layout Notes:
Superior Recreational Products strongly recommends the use of provided anchor bolt templates to insure accuracy of anchor bolt placements.



SUPERIOR RECREATIONAL PRODUCTS	Rev Date & Description:	**Superior Recreational Products**	Description: Ground Plan Layout					
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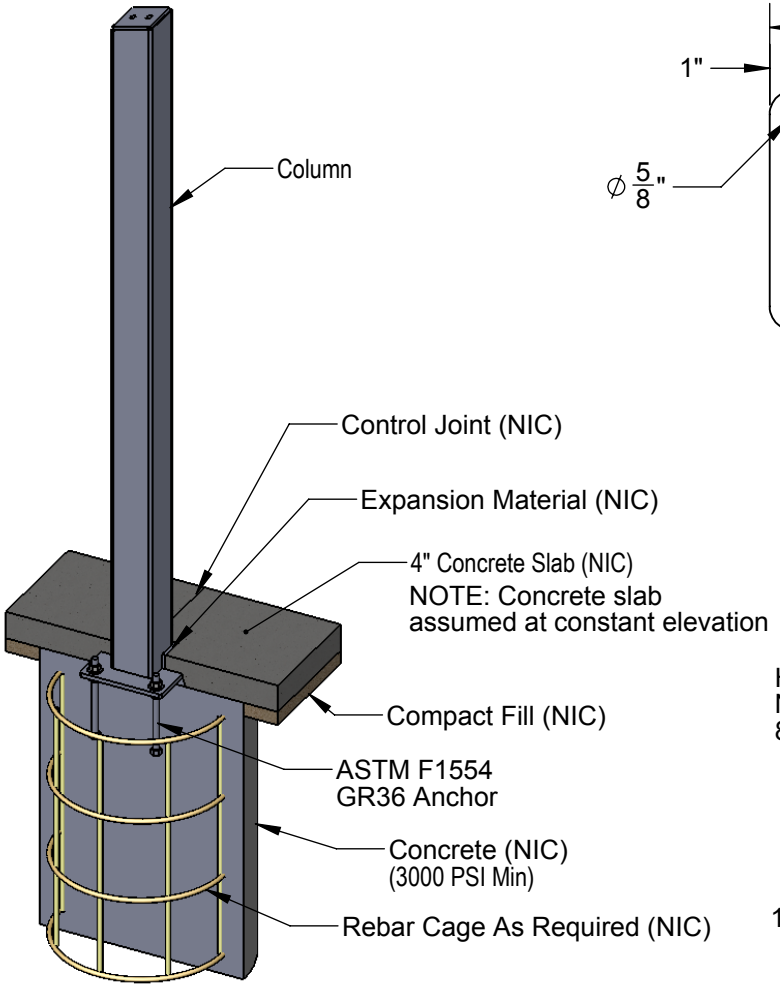
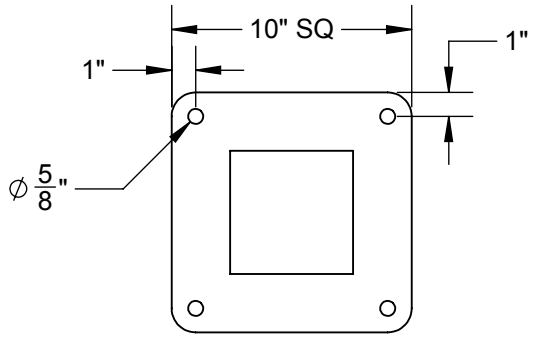
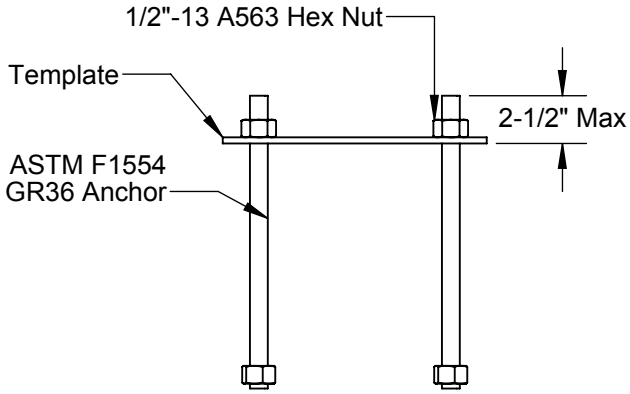
	Date: 4/29/2014 / Drawn By: DEB	**1050 Columbia Drive, Carrollton GA 30117** **Toll Free: 800-327-8774 Local: 770-832-6660**	Weight: lbs.	Size: A	Units: Inch	Tol: ±.0625 Unless Otherwise Specified	Scale: NTS	Sheet: 3 of 11



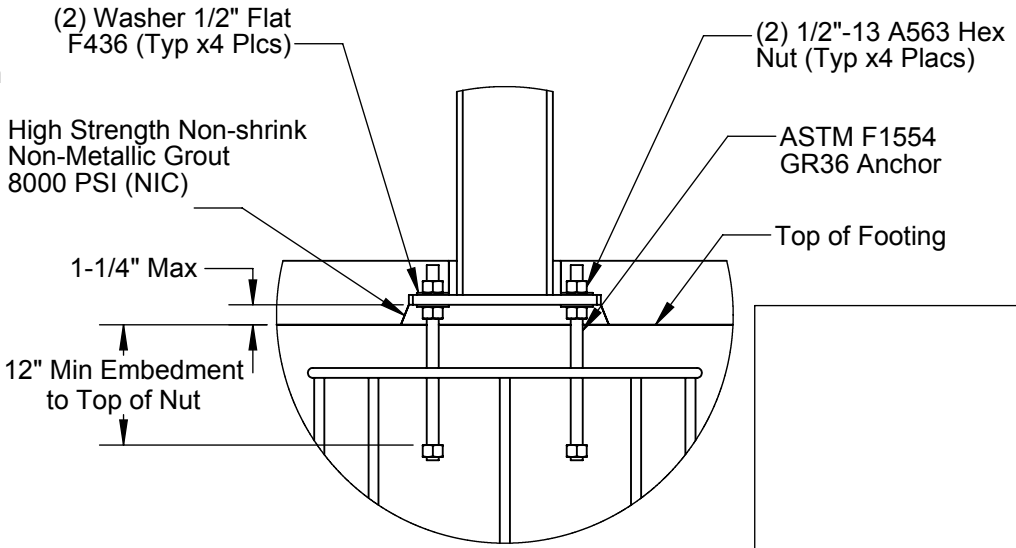
TYPICAL FOOTER
REPRESENTATION ONLY.
SEE SEALED CALCULATIONS
FOR FOOTER DETAILS.



1/2" Base Plate



Anchor Bolt Template Assembly



SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:

Rev Date & Description:

Date: 4/29/2014

Drawn By: DEB

Superior Recreational Products

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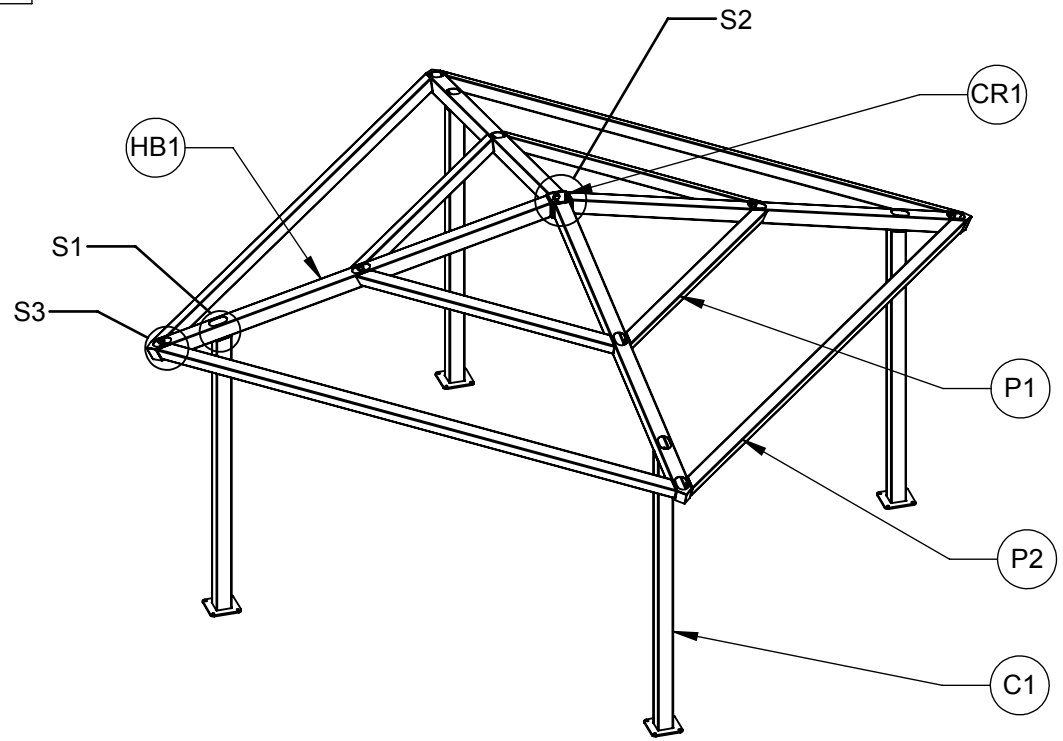
Description: Footer/Anchor Illustration

Material:	Rev:	Drawing Number:
	xx	4S16-AS

Weight:	Size:	Units:	Tol:	Scale:	Sheet:
lbs.	A	Inch	±.0625 Unless Otherwise Specified	1:40	4 of 11

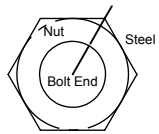
Plate Location	Plate Thickness
Compression Ring	3/8"
Column/Hip Beam	3/8"
Hip Beam/ Compression Ring	3/8"
Purlin/Hip Beam	1/4"



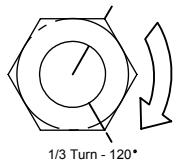
Tightening Method for Snug-Tightened Joints

1. All bolt holes shall be aligned to permit insertion of the bolts without undue damage to the threads.
2. Bolts shall be placed in all holes with washers positioned as required.
3. Snug-tighten to bolts in the joint.
4. Match-mark the nut and protruding end of the bolt.
5. Rotate the nut 1/3 turn past snug-tight.

Matchmarking



Required Turns



*See AISC "Specification for Structural Joints Using ASTM A325 or A490 Bolts" for complete details.

NOTE: NUTS ARE PRE-WELDED TO THE INSIDE OF HIP BEAM / PURLIN / COLUMN END PLATES.

SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:

Rev Date & Description:

Date: 4/29/2014

Drawn By: DEB

Superior Recreational Products

1050 Columbia Drive, Carrollton GA 30117
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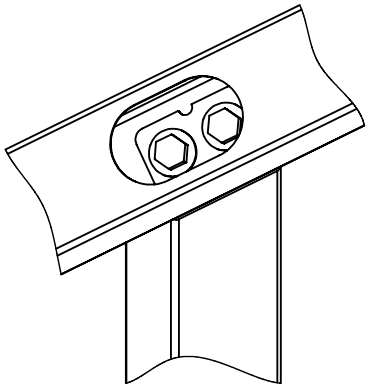
Description: Member/Connection Callouts

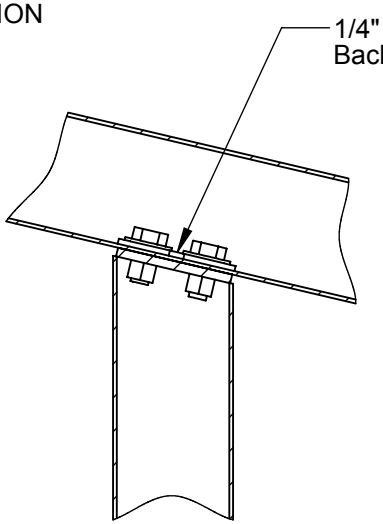
Material:	Rev:	Drawing Number:
	XX	4S16-AS

Weight:	Size:	Units:	Tol:	Scale:	Sheet:
lbs.	A	Inch	±.0625 Unless Otherwise Specified	NTS	5 of 11

CONNECTION (S1)
(4) PLACES
FASTENERS USED @ EACH CONNECTION
(2) Bolt 3/4"-10 x 2" A325 Plain
(2) Washer 3/4" ID x 1 1/2" OD Flat F436

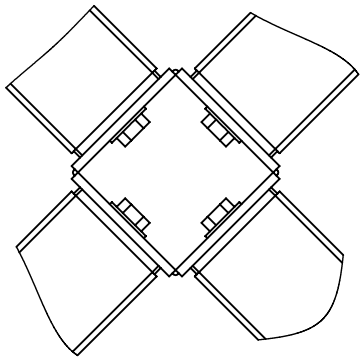


CONNECTION VIEW



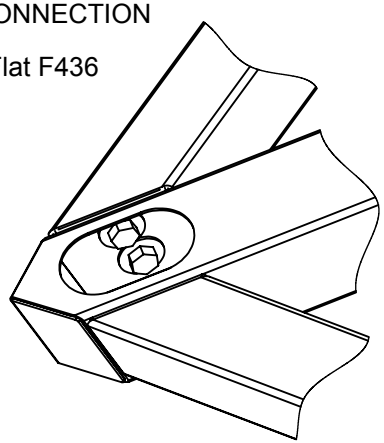
SIDE VIEW

CONNECTION (S2)
(1) PLACES
FASTENERS USED @ EACH CONNECTION
(8) Bolt 3/4"-10 x 2" A325 Plain
(8) Washer 3/4" ID x 1 1/2" OD Flat F436

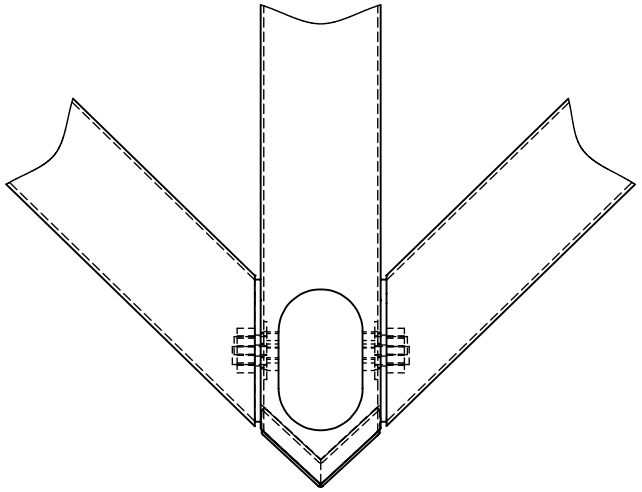


TOP VIEW

CONNECTION (S3)
(8) PLACES
FASTENERS USED @ EACH CONNECTION
(4) Bolt 3/4"-10 x 2" A325 Plain
(4) Washer 3/4" ID x 1 1/2" OD Flat F436



CONNECTION VIEW



TOP VIEW

SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:

Rev Date & Description:

Date: 4/29/2014

Drawn By: DEB

Superior Recreational Products

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Description: Conections Details

Material:

Rev: XX

Drawing Number: 4S16-AS

Weight: lbs.

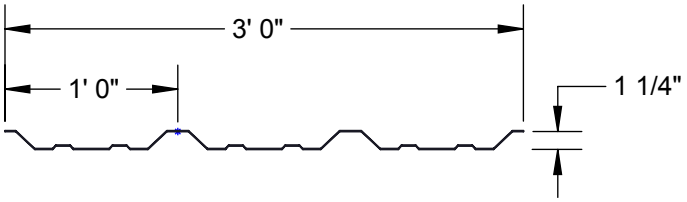
Size: A

Units: Inch

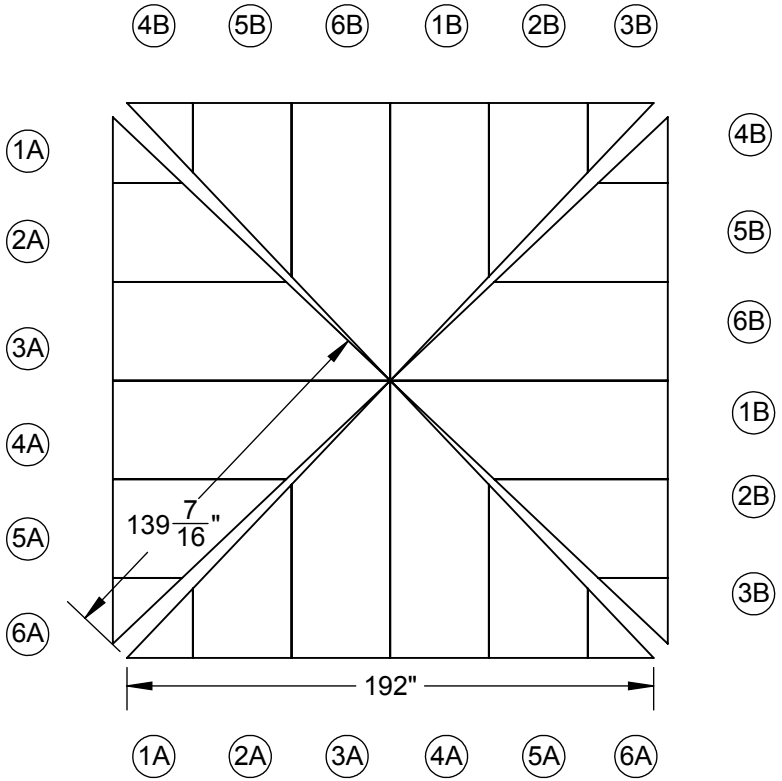
Tol: ±.0625 Unless Otherwise Specified

Scale: NTS

Sheet: 6 of 11



24ga. R-Panel Profile



SUPERIOR RECREATIONAL PRODUCTS	Rev Date & Description:	**Superior Recreational Products**	Description: Roof Panel Layout					
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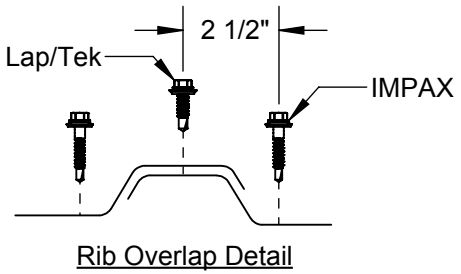
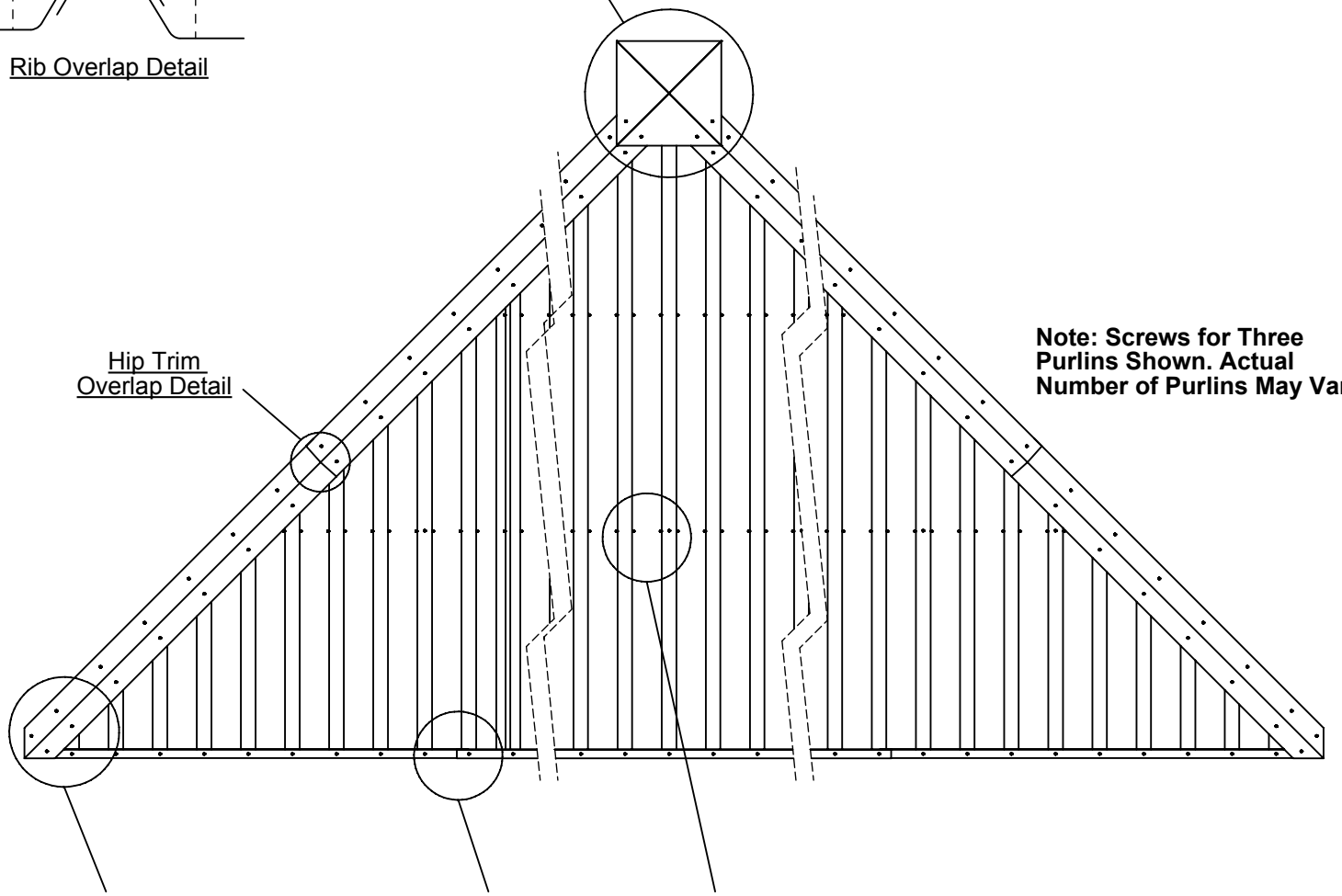
	Date: 4/29/2014 / Drawn By: DEB	**1050 Columbia Drive, Carrollton GA 30117** **Toll Free: 800-327-8774 Local: 770-832-6660**	Weight: lbs.	Size: A	Units: Inch	Tol: ±.0625 Unless Otherwise Specified	Scale: NTS	Sheet: 7 of 11



Rib Overlap Detail

Roof Cap Detail



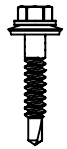
Hip Trim Overlap Detail

Note: Screws for Three Purlins Shown. Actual Number of Purlins May Vary.

Hip Trim Detail

Panel Cover Detail

Purlin Detail



1-1/4" IMPAX SCREWS (Roof Panels -to- Structural Steel)

Screw 1/4"-#14 x 7/8" Lap/Tek Self Driller w/ Washer

Correct Tightening Methods

CORRECT

TOO LOOSE

TOO TIGHT

SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:

Rev Date & Description:

Date: 4/29/2014

Drawn By: DEB

Superior Recreational Products

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Toll Free: 800-327-8774 Local: 770-832-6660

Description: Roof Screw Schedule

Material:

Rev: **XX**

Drawing Number: 4S16-AS

Weight: **lbs.**

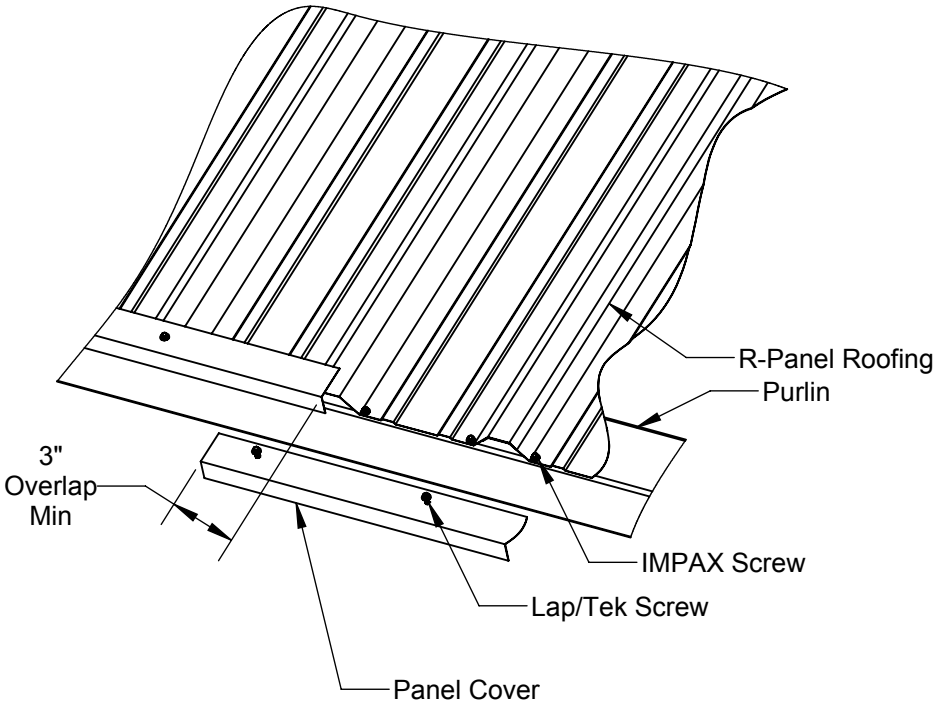
Size: A

Units: Inch

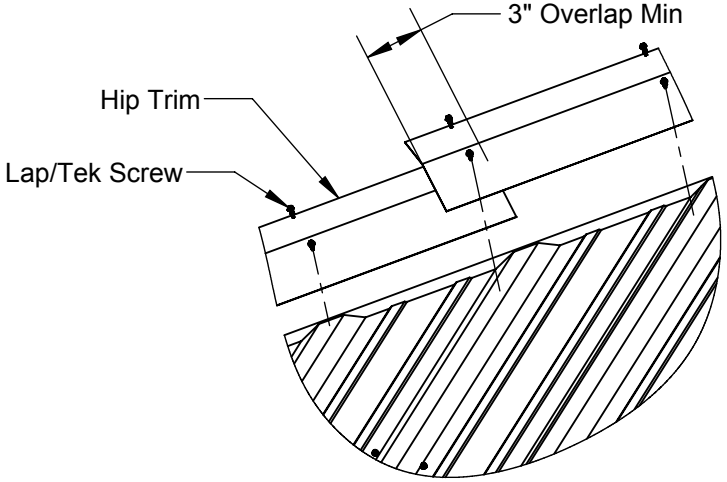
Tol: ±.0625 Unless Otherwise Specified

Scale: **1:40**

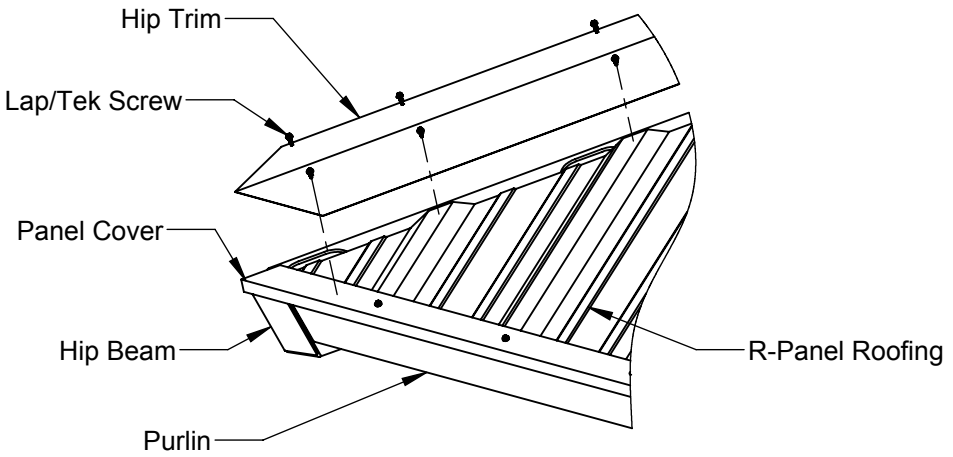
Sheet: 8 of 11



Panel Cover Detail



Hip Trim Overlap Detail



Hip Trim & Corner Details

SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:		**Superior Recreational Products**	Description: Panel Cover / Hip Trim Detail					
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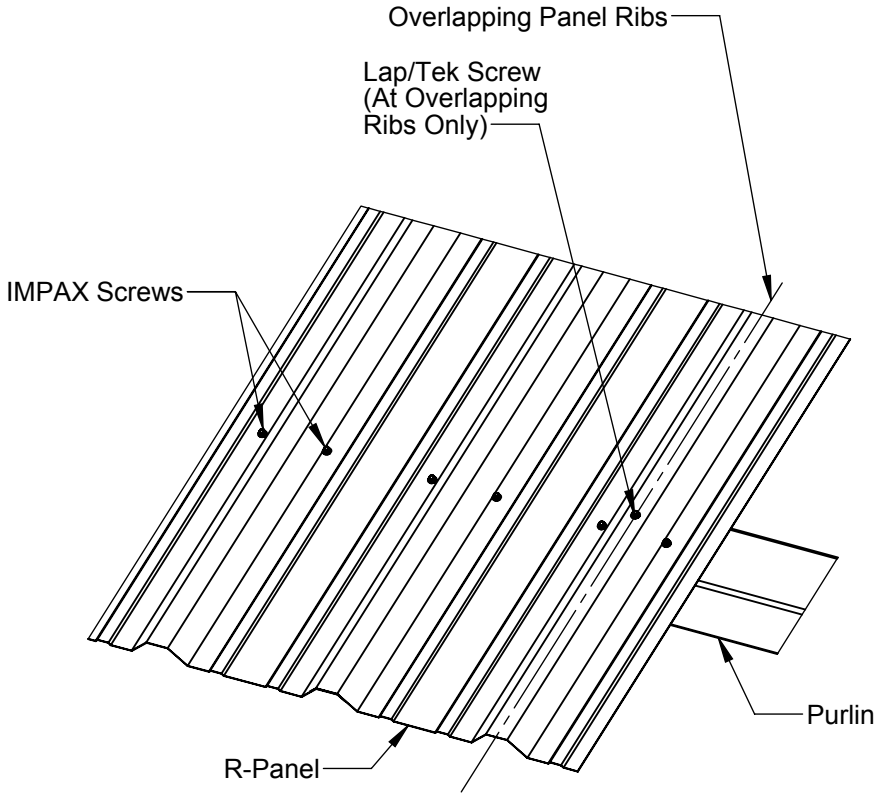
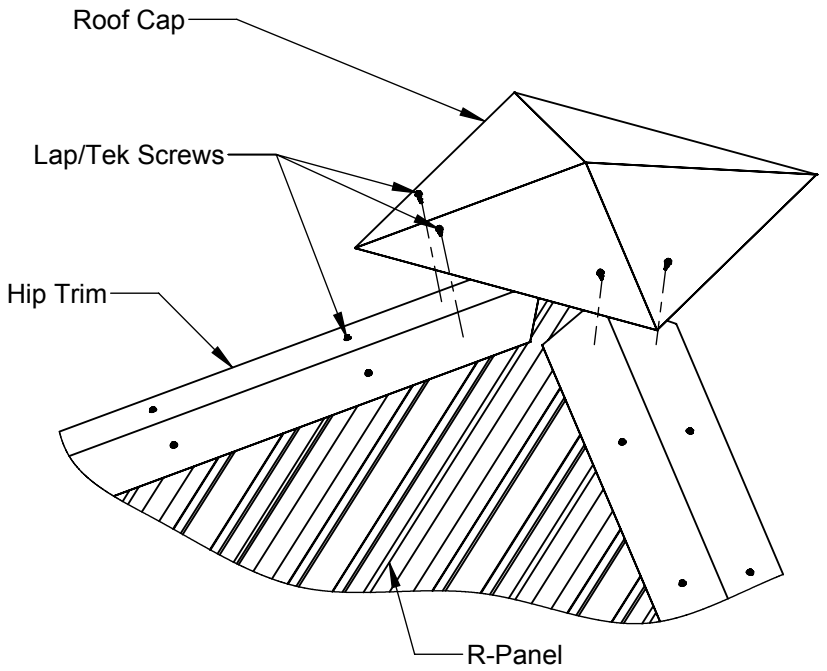
Date: 4/29/2014	Drawn By: DEB	**1050 Columbia Drive, Carrollton GA 30117** **Toll Free: 800-327-8774 Local: 770-832-6660**	Weight: **lbs.**	Size: A	Units: Inch	Tol: ±.0625 Unless Otherwise Specified	Scale: **NTS**	Sheet: 9 of 11



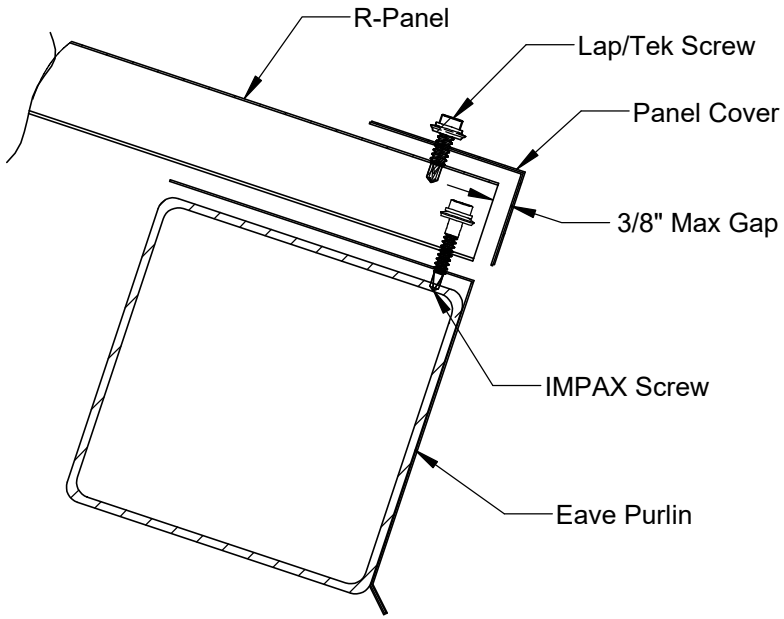
Purlin Detail



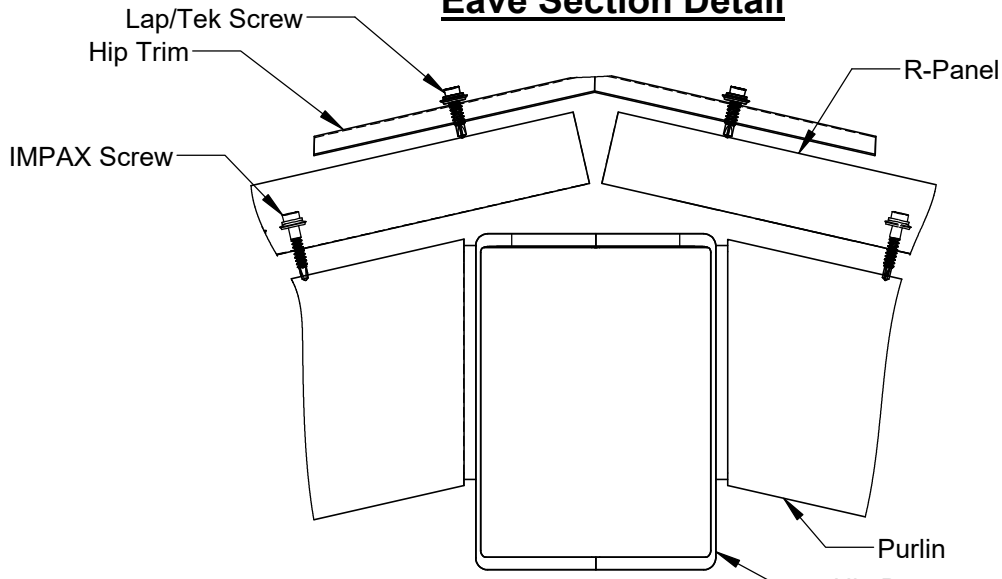
Roof Cap Detail

SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:		**Superior Recreational Products**	Description: Purlin / Roof Cap Detail					
Rev Date & Description:			Material:	Rev: **xx**	Drawing Number: 4S16-AS		
Date: 4/29/2014	Drawn By: DEB	**1050 Columbia Drive, Carrollton GA 30117** **Toll Free: 800-327-8774 Local: 770-832-6660**	Weight: **lbs.**	Size: A	Units: Inch	Tol: ±.0625 Unless Otherwise Specified	Scale: **NTS**	Sheet: 10 of 11

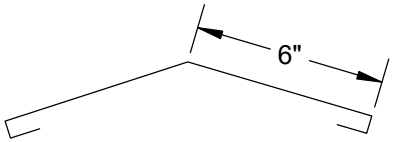


Eave Section Detail

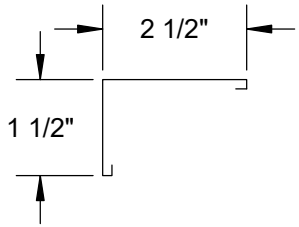


Hip Section Detail

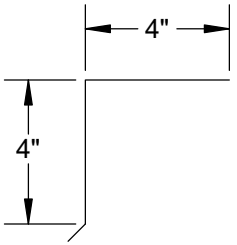
TRIM PROFILES



HIP TRIM



PANEL COVER



EAVE TRIM

SUPERIOR RECREATIONAL PRODUCTS

Rev Date & Description:

Rev Date & Description:

Date: 5/23/2017

Drawn By: DEB

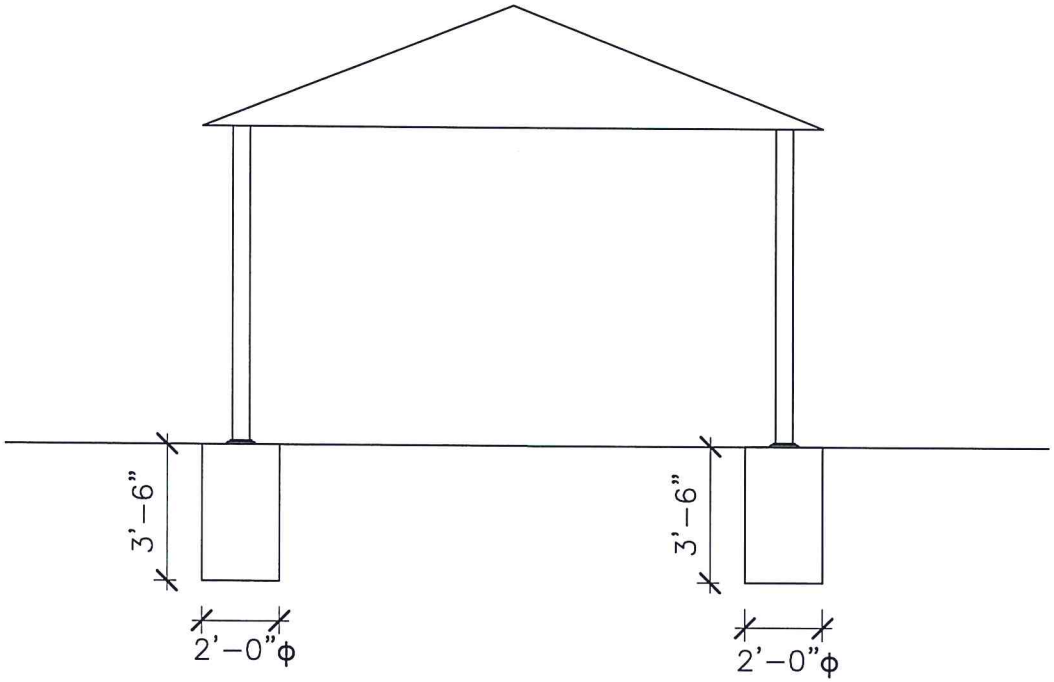
Superior Recreational Products

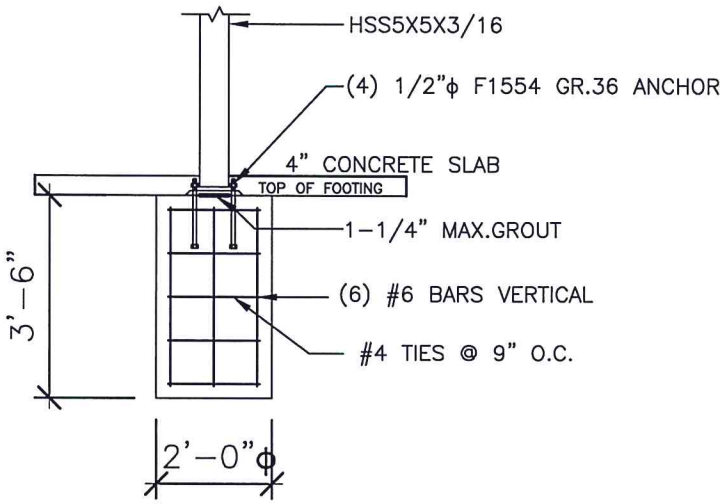
1050 Columbia Drive, Carrollton GA 30117
Toll Free: 800-327-8774 Local: 770-832-6660

Description: Section Detail

Material:	Rev:	Drawing Number:
	xx	4S16-AS

Weight:	Size:	Units:	Tol:	Scale:	Sheet:
lbs.	A	Inch	±.0625 Unless Otherwise Specified	**NTS**	11 of 11





8/4/17

MONTANA
THOMAS R. SADLER
5110E

THE SADLER GROUP
STRUCTURAL ENGINEERS
TEXAS FIRM REG. # F-4167
500 MAIN ST. ◦ SUITE 700
FORT WORTH, TEXAS 76102

Causeway Fishing Site
QU00128111A Footing Detail
Helena, MT

21

PROJECT NO.	DATE: 08/04/2017	DRAWN BY: RS	SHEET NO. S1

ROCKART SIGNS AND MARKERS 480-854-3400

MESSAGE CENTER KIOSK *Parts List*

Model: 03-441/-BS/-WOS

2Panel Gable Roof Kiosk (48x48 panels)

Before You Start . . .

Please make sure that you have received all of the components listed below as well as the Tools & Supplies listed here you will need to successfully complete your kiosk installation.

03-474 Qty. = 2 | 03-477 Qty. = 1

03-424 Qty. = 4

03-423 Qty. = 2

03-429 Qty. = 4

#10-16 x .5" Long Hex Washer Head Qty.=7

03-931

3/8-16 x 3/4" Button Head Qty.=20

3/8-16 x 2" Hex Head Bolts Qty.=2

03-926

3/8-16 x 3/4" Button Head Qty.=4

03-954

03-436 Qty. = 2

Qty	Part#	Description
1	03-477	6x6 x 120 Long (.188 Thk Steel Tube) Center Post for Roofed Kiosk, 4 mounting tabs (48h Sign Panels)
2	03-474	6x6 x 120 Long (.188 Thk Steel Tube) END POST for Roofed Kiosks, 2 mounting tabs (48h sign panels)
4	03-429	Gable Roof Mounting Plate (inside)
2	03-926	Hardware Kit (for installing 2 Roof Mounting Plates (left & right); AND front & back Gable Roof subassembly AND Ridge Cap)
2	03-423	61.5" Ridge Cap for Gabled roof (green or brown)
2	03-931	Hardware to install Ridge Cap
4	03-424	61.5 x 32 Gable Roof Panel Subassembly (front or back)
2	03-916	Hardware Kit (to install 2 Shingle Overlays on Gable roof panels)
4	03-425	61 x 31.5 Shingle Overlay for Gable Roof (Green or Brown)
2	03-436	Gable Roof End Cap (Brown)
1	03-954	Hardware Kit (for installing 2 Gable Roof End Caps)
2	08-1005	.14 Oz Packet Anti-Seize Compound
1	08-627	7/32 x 3" Long Hex L-Key (Drilled for 3/8 Button Head Screws, Pin-in-Hex)

03-425 Qty. = 4

#10-16 x .5" Long Hex Washer Head Qty.=47

03-916

Optional Products Recommended by Rockart

Part#	Description	Price ea.
03-524	Aluminum Assembly Fixture (for 48" wide sign panels)— used during installation to maintain spacing between Posts without risking damage to your sign panels. The price (less shipping) will be refunded when you return this Fixture, in good condition, to Rockart. RECOMMENDED Qty: 2	$175.00
08-637	7/32 Screwdriver, drilled for 3/8-16	18.00
08-639	5/16 Hex Nut Driver	3.50
08-1015	Touch Up Paint, Rust Texture, 12 oz. aerosol can	12.00

03-524
3 pieces, includes
1 hardware kit #03-918

03-918
12@3/8-16 x .75 hex head bolts,
12 nuts and 12 washers

Tools & Supplies That Customer Will Need to Supply

1) Auger and 12" bit
2) Post hole digging tools
3) Wheelbarrow
4) Cement (4-6 bags/hole)
5) Water
6) Hoe
7) Two to four 12' long 2 x 4's
8) 4 to 6 concrete spikes
9) Wood saw
10) Pieces of 2 x 4 and 2 x 6
11) Bottle jack
12) Framer's level
13) Three saw horses
14) 3/8-16 tap
15) Tap wrench for a 3/8-16 tap
16) Drill motor
17) Two box or end wrenches
18) Metal Tape Measure
19) (2) 6' Step Ladders
20) 5/16" Hex Driver (For 03-923-WOS) See 08-639, above

3006 N. Maple Street | Mesa, AZ 85215 | P:(480) 854-3400 F:(480) 832-6390 | www.rockartsigns.com | sales@rockartsigns.com

ROCKART
SIGNS AND MARKERS
480-854-3400

Message Center Kiosk
Front View Drawing

Model: 03-441/-BS/-WOS

2Panel Gable Roof Kiosk (48x48 panels)

Front View Drawing
Shows Aluminum Assembly Fixtures, Sign Tabs, Roof and Shingles

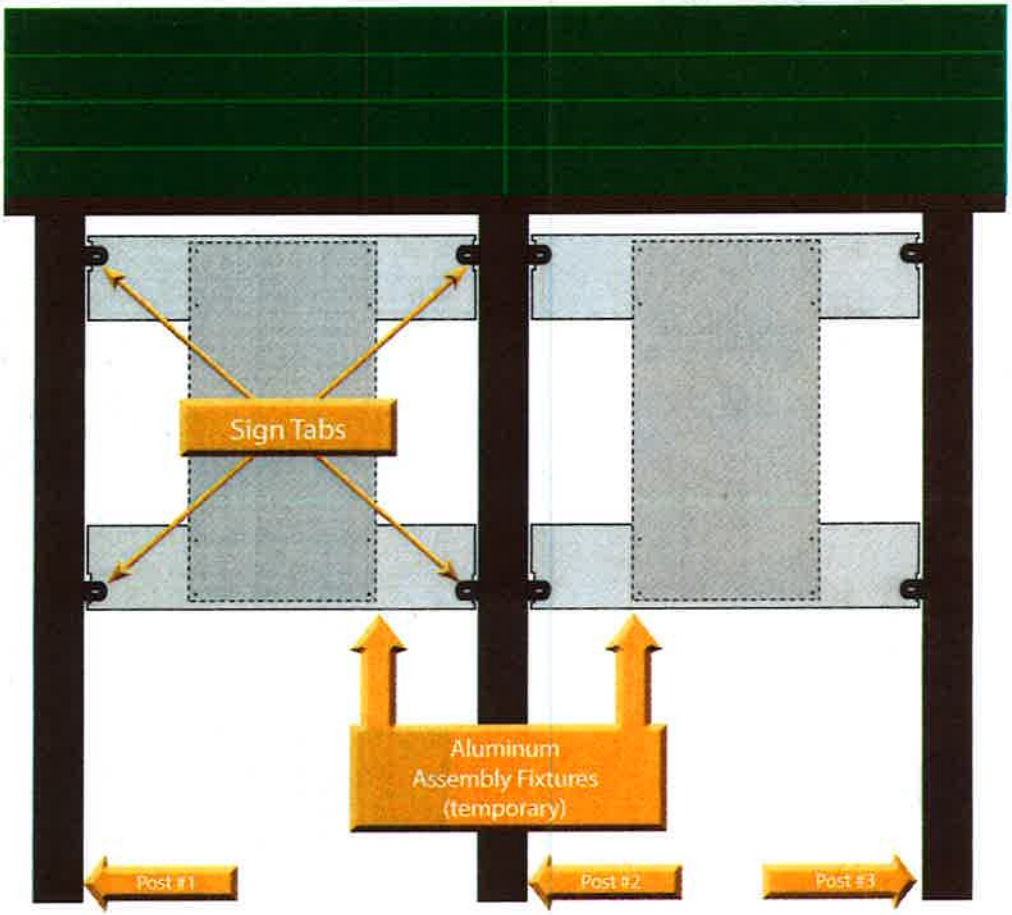


DIAGRAM #1
Guide for installing Roof Mounting Plates

ROCKART
SIGNS AND MARKERS
480-854-3400

MESSAGE CENTER KIOSK
Hole Digging Guide
Model: 03-441/-BS/-WOS
2Panel Gable Roof Kiosk (48x48 panels)

Before you begin it is recommended that you review this entire installation guide.

Hole Digging Guide

Find and Mark Post Positions:

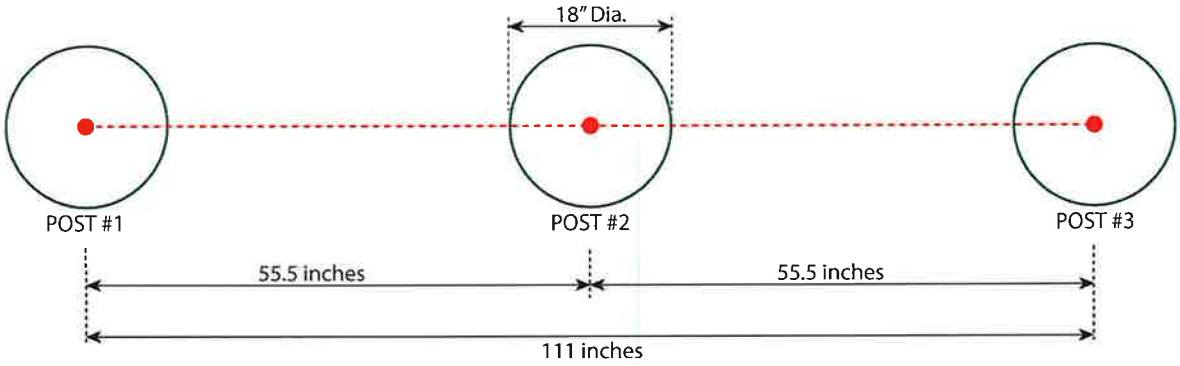
1. Using a metal tape measure, position one end of it at the spot on the ground where the center of Post #1 will be.
2. Measure exactly 111 inches straight to the right of that spot and mark the ground where the center of Post #3 will be.
3. With the tape measure still in place, make a mark on the ground at 55.5 inches (mid-point) ... this being where the center of Post #2 will be.

Review the diagram below:

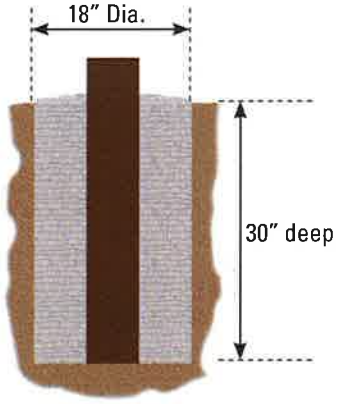
The straight red dashed line and 3 red dots represent where the centers of each post will be located.

Each of the 3 green circles represents an 18" diameter area that should be excavated to a depth of 30" inches.

If installing the kiosk in a location where the ground is NOT LEVEL, these hole depths may need to be adjusted.



FRONT OF KIOSK



ROCKART
SIGNS AND MARKERS
480-854-3400

Message Center Kiosk
Installation Guide

Model: 03-441/-BS/-WOS
2Panel Gable Roof Kiosk (48x48 panels)

What You Will Need to KNOW...	These Instructions Apply to Model(s):
Be sure you have reviewed these related sections: • Kiosk Parts, Tools & Supplies List , PG 1 • Front View Drawing , PG 2 • Hole Digging Guide, PG 3 • This Installation Guide • Sign Panel Installation Guide (if your kiosk was purchased with sign panels)	#03-441 (Green Shingled Roof) #03-441-BS (Brown Shingled Roof) #03-441-WOS (Non Shingled Roof)

PLEASE READ FIRST

ROCKART STRONGLY RECOMMENDS the following for the best results:

- For this size Kiosk, we recommend a 2 to 3 person crew.
- Assembly time takes 2 to 3 hours.
- Check to make sure all tools mentioned at the bottom of page 1 are supplied
- Hardware and small tools will ship to you separately via UPS at the same time your Kiosk(s) ships.
- With regards to left/right designations, instructions are written with the assumption that the reader is facing the front of the Kiosk.
- A special hex wrench with a hole in the end is supplied to assemble the roof panels. One is supplied with every Kiosk and is painted red.
- You need TWO, 03-524 Aluminum Assembly Fixture. NOTE: DO NOT ATTEMPT TO Use Sign Panels in place of the Assembly Fixture! The fixture maintains proper spacing between posts while they are being installed. By using them, you won't risk damaging your actual sign panels, should something go wrong.
- IMPORTANT: Keep the original Aluminum Assembly Fixture boxes. They are necessary to return the fixture(s) for your deposit refund.

Stage I - Assemble & Install the Kiosk

Getting Started

1. Review Pages 1 & 2. Get familiarized with the kiosk part names & numbers.
2. DIG HOLES – Using the guide on Page 3.
3. Make sure all holes are only 30" deep for proper viewing height of kiosk sign panels!

Part 1 : Preparation & Pre-Assembly

1. ALUMINUM ASSEMBLY FIXTURES – Assemble the required Aluminum Assembly Fixture(s) using bolt kit #03-918, containing 3/8-16 hex head bolts, nuts and washers. Note: Do not apply Anti-Seize on the Assembly Fixture's bolts! Hang on to the remaining hardware, you will need it later.
2. CLEAN ALL THREADS – Clean all 3/8" threaded holes with a 3/8-16 tap and tap wrench to remove corrosion and paint from the threads of both sides of all roofs and all vertical posts before beginning assembly. (Figure 1)
3. If your kiosk order included shingle overlays you should pre-assemble the 4 roofing panels before they are needed by following the steps 4 & 5 below, otherwise skip to step 6:

4 Take a gable roof panel (03-424) and place it across 2 sawhorses with the top side facing up. Locate the row of 7 holes along the long edge of the roof panel indicating the top. Locate a shingle overlay (03-425). Make sure the shortest step of the shingle is positioned at the bottom of each roof panel. Align the shingle with the roof panel so the 4 corner holes line up then secure the shingle to the roof panel using screws from 03-916. Using the holes in the shingle overlay as your guide, install a screw into each hole.

5 Set the assembled roof panels aside until needed. Repeat steps 4 & 5 until all roof panels and shingle overlays are matched up and assembled.

6 Select 2 of the 4 gable roof panels and install a Ridge Cap (03-423) using screws from 03-931. These two roof panels will be used to roof the FRONT SIDE of the kiosk

Figure 1

Figure 2

Figure 3

PART 2 : VERTICAL POST ASSEMBLY

1 POST ASSEMBLY – Place the capped tops of Posts 1 & 3, (#03-474) across two sawhorses positioned so that the slotted sign tabs are pointing inward (toward each other). The bottom uncapped ends of these 2 posts should be positioned over the holes dug in the ground. Place a piece of 2x6, 36" long in each hole on the opposite side of the posts. This acts as a guide and allows the posts to slide into the hole with less resistance and with less dirt falling into the hole. (Figures 2 & 3)

2 In a similar fashion, position the center Post #2 (03-477) on a 3rd sawhorse, with sign tabs pointing left & right

3 Install ASSEMBLY FIXTURE #1 – Use (4) 3/8-16 bolts, nuts and washers from 03-918 to attach an Aluminum Assembly Fixture to the four slotted sign tabs from the ***backside*** of Posts 1 & 2. (Figure 4) The 1" bent flange along the top/bottom should be facing forward. Be sure the vertical edges of the Aluminum Assembly Fixture are flush against the vertical edge of the posts. Note: Always place a flat washer next to the sign tab slot before applying a nut. (Figure 5)

4 Install ASSEMBLY FIXTURE #2 – Use (4) 3/8-16 bolts, nuts and washers from 03-918 to attach an Aluminum Assembly Fixture to the four slotted sign tabs from the ***backside*** of Post 2 & 3. (Figure 4) The 1" bent flange along the top/bottom should be facing forward. Be sure the vertical edges of the Aluminum Assembly Fixture are flush against the vertical edge of the posts. Note: Always place a flat washer next to the sign tab slot before applying a nut. (Figure 5)

5 See Diagram #1 on Page 2 for installing ROOF PLATES – ***Loosely*** attach (4) roof mounting plates #03-429 to the tops (capped ends) of the posts using (4) 3/8-16 x 3/4" long, pin-in, stainless steel button head bolts for each plate from 03-926. (Figure 6) Apply a dab of Anti-Seize to each bolt first. DO NOT tighten bolts yet.

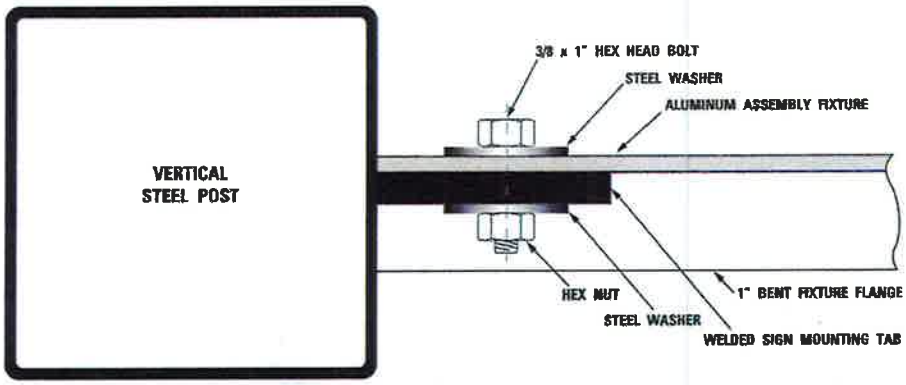


Figure 5

Figure 4

Figure 6

6 RAISE THE POSTS – Gently raise the entire assembly (Post 1, 2 & 3) and carefully ease the posts into the pre-dug holes. (Figure 7)

7 Securely support the structure front and back using the customer-supplied 12ft wooden 2x4's and concrete spikes as needed. If available, Large Rocks placed into the holes between the post and the wall of the hole work well to stabilize the structure.

PART 3 : INSTALL ROOF PANELS

Starting with the left side of the kiosk, you will install the rear roof panel assembly first, then the corresponding front side roof panel assembly. Then you will repeat this procedure for the right side of the kiosk.

1 Select a roof panel assembly that does NOT have a ridge cap installed on it and Lay it across (2) sawhorses up-side-down. Screw (2) 3/8-16 X 2" hex head bolts from 03-926 into the holes closest to the center of the roof. Use the inside set of holes. These two bolts are used to install each of the roof panels, so *Don't tighten these bolts*. (Figure 8)

MESSAGE CENTER KIOSK
Installation Guide

Model: 03-441/-BS/-WOS
2Panel Gable Roof Kiosk (48x48 panels)

Figure 7

Figure 8

Figure 9

2 LIFT & HANG – Lift the roof panel assembly into place. (Figure 9) Let the (2) long bolts installed in the previous step to slide into the slots in the roof mounting plate. Let the roof hang. (Figure 10)

3 SECURE ROOF Panel – Rotate the roof panel into place between the roof mounting plates and secure with (6) 3/8-16 x 3/4" long, pin-in, stainless steel button head bolts. Always apply a dab of Anti-Seize to each bolt first. Leave bolts *very loose*. Remove the two 2" long swivel bolts installed in step 2 and replace them with (2) stainless steel button head bolts from 03-926.

4 CHOOSE FRONT ROOF PANEL – Now select another roof panel assembly with a ridge cap installed, and lay it across (2) sawhorses up-side-down. Screw the (2) 3/8-16 X 2" hex head bolts in the holes closest to the center of the roof. Both in the inside set of holes. Do not tighten these bolts as they are used temporarily. (Figure 8)

5 LIFT & HANG – Lift the front roof panel assembly into place. (Figure 9) Let the (2) long bolts installed in the previous step 5 to slip into the slots in the roof mounting plate. Let the roof hang. (Figure 10)

6 SECURE ROOF PANEL – Rotate the roof panel into place between the roof mounting plates and secure with (6) 3/8-16 x 3/4" long, pin-in, stainless steel button head bolts. Always apply a dab of Anti-Seize to each bolt first. Leave bolts *loose*. Remove the two 2" long swivel bolts installed previously and replace them with (2) stainless steel button head bolts from 03-926.

7 REPEAT steps 1-6 for the remaining roof sections.

8 INSTALL ROOF END CAPS - Attach each Roof End Cap Plate (#03-436) near the apex where the two roof panels meet using #03-954 (2) 3/8-16 x 3/4" long pin-in stainless steel button head bolts, but do not tighten the bolts (Figure 11).

PART 5 : FINAL STEPS

1 RE-CHECK ASSEMBLY FIXTURES AND BOLTS – Make sure all Assembly Fixtures are flush with the vertical posts and all bolts are tight.

2 TIGHTEN BOLTS – Tighten all roof mounting plate stainless steel button head bolts (Figure 11) with the supplied hex wrench 08-627 (it is red, with a hole in the end).

3 BRACE POSTS - Brace the entire structure if necessary with 12' long, 2x4 kickers, notched for concrete form spikes. (Figure 13)

Figure 10

Figure 11

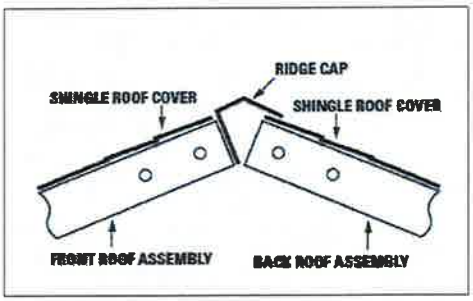


Figure 12

Figure 13

Figure 14

Figure 15

4 LEVEL STRUCTURE AND PLUMB POSTS – Check that all Assembly Fixtures are level and that each post is plumb. Tip: To level Assembly Fixture, use pieces of 2x4 and 2x6 placed under the lower side of the Assembly Fixture. Use a bottle jack placed between the wood and ground to level the Assembly Fixture. (Figure 14)

5 POUR THE CONCRETE – After you have leveled the Assembly Fixtures and plumbed all posts, pour 4-6 bags of mixed concrete into each hole (Figure 15). Sit back, relax and allow concrete to set properly.

6 REMOVE THE ASSEMBLY FIXTURES – After the concrete has properly set, remove all Aluminum Assembly Fixtures. FYI: The Aluminum Assembly Fixture may also be used to transfer mounting holes to any 48" x 48" sign. If this is the case, you may want to keep one for that purpose. (Figure 16)

You're done with building the Kiosk structure. It should look something like Figure 16.
You are now ready to move on to STAGE II - Sign Panel Installation.

Later be sure to disassemble each ALUMINUM ASSEMBLY FIXTURE. Return-ship back to Rockart Signs and Markers, Inc. in good, usable condition, in the original boxes used to ship them to you. (No need to return the screws used to assemble them.) Your account will be credited for the deposit, minus shipping charges.

IMPORTANT NOTE: SAVE ANY SPECIAL TOOLS!

- Please give all HEX Keys (Red & Yellow) to the Owner or Agency person(s) in responsible for the kiosk.

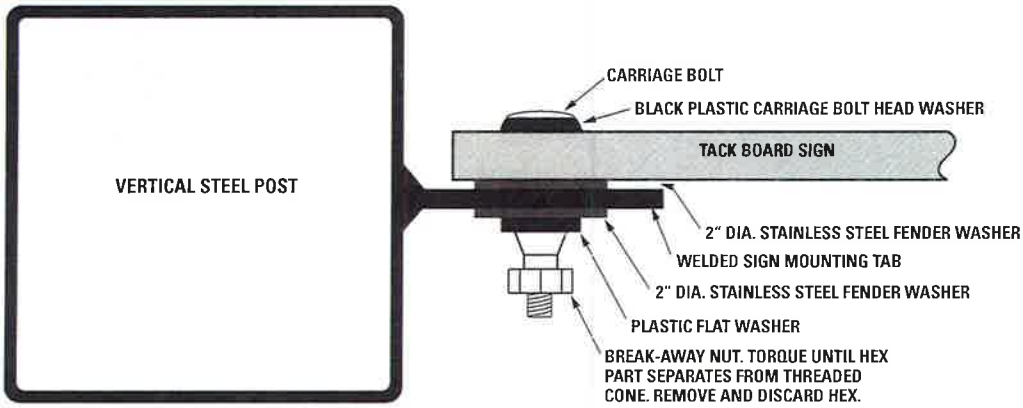
- The YELLOW Hex Key is used to open up the Sign Panel. (i.e., when swapping out the displayed signage / information)
- The RED Hex Key is used to replace a damaged Roof Assembly in the future.

Figure 16

STAGE II - Sign Panel Installation Guide

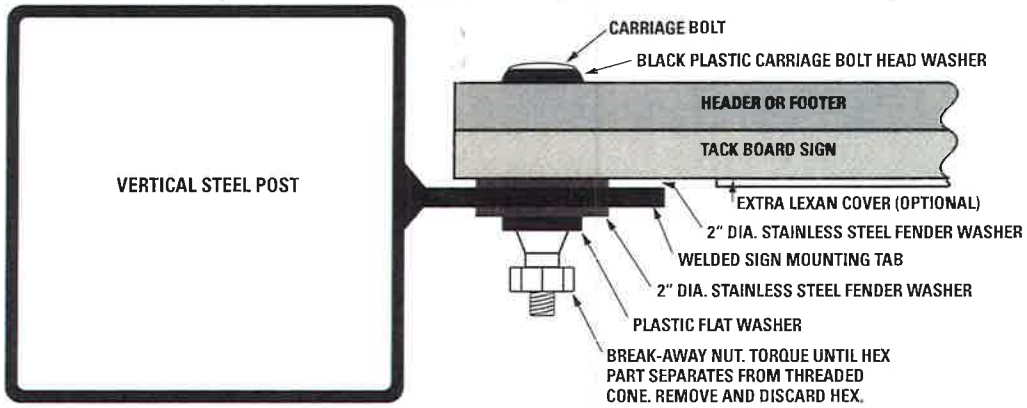
TACK BOARD ONLY

#03-901 ASSEMBLY KIT



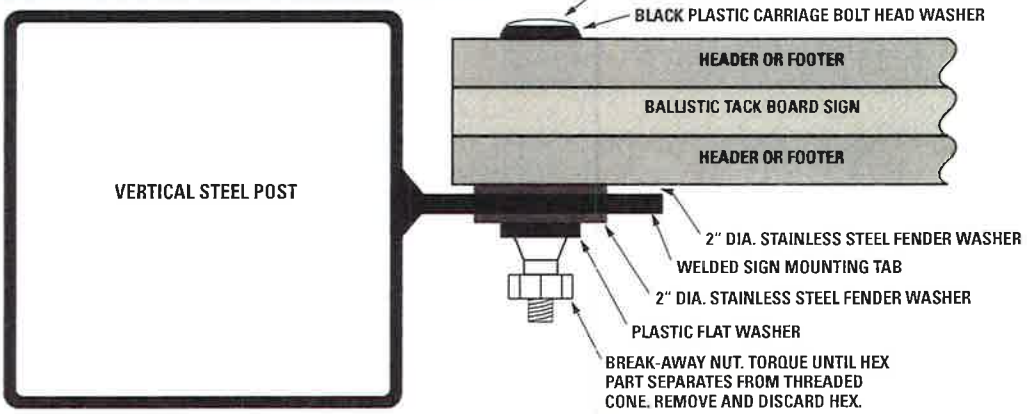
HEADER OR FOOTER (1 SIDE)

#03-903 ASSEMBLY KIT



HEADER OR FOOTER (ON BOTH SIDES)

#03-904 ASSEMBLY KIT



MESSAGE CENTER KIOSK
Removing Polycarbonate Cover

ROCKART® SIGNS AND MARKERS 480-854-3400

Stuff You Need to Know	*These Instructions Apply to:*
• You'll need the ***specially-keyed, L-shaped YELLOW hex wrench*** (included with *fully-enclosed* **ROCKART®** Sign Panels). • Consider using tape to mount your graphic. The tack board is VERY dense; thumbtacks, staples or pushpins will probably not be able to penetrate it. • Keep the inside of the sign panel as clean as possible: Temporarily covering the ground while performing these steps, will help keep dirt out.	***ROCKART®*** ***Message Center Kiosk*** ***Sign Panels*** *(Single or Double-sided and Fully Enclosed)*

REMOVING THE COVER

IMPORTANT: *DON'T REMOVE THE 4 CORNER BOLTS SECURING THE SIGN PANEL TO THE KIOSK !*

1 ***USE*** the special **YELLOW** hex wrench (included with your sign panel) to ***REMOVE*** the tamper-resistant bolts usually located on the right side of a sign panel (from the Front side of kiosk). ***Don't lose these bolts!*** The nuts are embedded in either the tack-board (for single-sided panels) or in a matching removable side rail on the opposing side (double-sided panels) and should stay in place while the bolts are removed. Remove bolts marked as "1" (see figure, right).

2 ***REMOVE*** the side rail (or rails) of the Sign Panel and set aside.

3 ***REMOVE the Flexible PLASTIC ROD*** inserted into the space above the polycarbonate cover. Don't lose it! (This important feature secures the cover and graphics)

4 ***SLIDE*** the cover over about an inch, so you can ***FIRMLY GRASP*** both sides.

5 ***LIFT*** the cover straight up into the top grooved channel then ***PIVOT*** the bottom edge towards your body, until it is completely free. Set the cover aside (somewhere clean) so it can be replaced with the same side facing outward. *(Remember which side faces out... since UV or Anti-Graffiti films are usually applied to one side only.)*

6 ***SWAP OUT SIGN CONTENT***

7 If ***REPLACING A DAMAGED COVER***: Be sure to remove any protective liners on one or both sides of the polycarbonate cover *as soon as possible*. If the protective liner is not removed, and exposed to sunlight for extended periods, it may be difficult to remove. If your cover included a UV- or Anti-Graffiti overlaminate film, ***Don't try removing it!***

REPLACING THE COVER

NOTE: *Replace the cover with same side facing out (UV or Anti-Graffiti films are usually applied to one side only).*

1 ***GRASP*** the left & right sides of the cover, ***INSERT*** the top edge fully into the top grooved channel.

2 ***PIVOT*** the bottom edge of cover to line up with the bottom grooved channel. Carefully ***RELEASE*** it, allowing it to sit in the bottom grooved channel.

3 ***GENTLY SLIDE*** the cover left/right (toward the non-removable side rail) until it cannot go any further.

4 **RE-INSERT** the ***Flexible PLASTIC ROD*** into the gap just above the cover itself.

5 Finally, ***REPLACE*** the vertical rail(s) and secure with the tamper-resistant bolts using the special YELLOW hex wrench.

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SPECIFICATIONS FOR WORK

TECHNICAL PROVISIONS

Incorporation of Montana Public Works Technical Specifications.

The Technical Specifications as found in Montana Public Works Standard Specifications (MPWSS), Sixth Edition, April 2010; are hereby incorporated by reference and made a part of this Contract:

Incorporation of Montana Fish, Wildlife & Parks Technical Specifications and Modifications to MPW Technical Specifications.

In addition to the MPWSS Technical Specifications are the following Montana Fish, Wildlife & Parks Technical Specifications (modifications to MPWSS Technical Specifications).

SECTION 01050 -	Field Engineering
SECTION 01400 -	Contractor Quality Control and Owner Quality Assurance
SECTION 01450 -	Mobilization/Demobilization
SECTION 01750 -	Final Cleanup
SECTION 02230-	Street Excavation, Backfill, and Compaction
SECTION 02910 -	Seeding
SECTION 02940 -	Signing
SECTION 03321-	Concrete Wheel Stops
SECTION 99998-	Wood Post and Steel Cable Barriers

SECTION 01050

FIELD ENGINEERING

All applicable portions of this specification section in the MPWSS shall apply with the following additions, deletions and/or modifications.

PART 3 EXECUTION

Add the following:

1.3 CONSTRUCTION SURVEY

A. Landscape Architect will provide survey control (northing/easting), benchmarks (local datum), and grade stakes for all designed alignments and profiles, as shown on the project drawings.

PART 4 MEASUREMENT AND PAYMENT

Add the following:

A. Contractor construction surveying will not be measured for payment, and is considered incidental to other bid items in this contract.

END OF SECTION 01050

SECTION 01400

CONTRACTOR QUALITY CONTROL AND OWNER QUALITY ASSURANCE

All applicable portions of this specification section in the MPWSS shall apply with the following additions, deletions and/or modifications.

PART 3 EXECUTION

3.1 GENERAL

C. Replace with the following:

The Contractor is responsible for providing all quality assurance testing by an independent testing agency. The Contractor will pay for all quality assurance testing by an independent testing agency.

PART 4 MEASUREMENT AND PAYMENT

Replace with the following:

4.1 PAYMENT FOR TESTING

The Contractor will pay for all quality control testing. The Contractor will pay for all quality assurance testing by an independent testing agency. The Contactor will pay for all associated re-testing efforts (both quality control and quality assurance).

END OF SECTION 01400

SECTION 01450

MOBILIZATION/DEMOBILIZATION

Added Section.

PART 1 GENERAL

1.1 DESCRIPTION

A. This item shall consist of the prepatory work and operations necessary performed by the Contractor for the movement of personnel, equipment, supplies, and incidentals to and from the work site. The work includes those actions necessary for obtaining necessary permits required for mobilization; for the establishment of all offices and facilities necessary to work on the project; for premiums on contract bonds; for insurance for the contract; and for other work on the various items on the project site. Mobilization costs for subcontracted work shall be considered to be included. This item also includes installation and maintenance of silt fence, as shown on the site plan, throughout the term of the contract.

B. Contractor's cost for administration, bonding, insurance, and site documents shall be included in mobilization and shall not be paid as a separate item.

C. All equipment moved to the project sites shall be in good mechanical condition and free of fuel, oil, lubrication, or other fuel leaks. The Contractor shall immediately remove any equipment potentially or actually discharging environmentally damaging fluids.

D. All equipment moved to the project sites shall be thoroughly cleaned before it is brought to the sites to prevent the introduction of weed seeds. Equipment removed fro the sites may not be returned to the sites again until it is thoroughly cleaned again.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

PART 4 MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

A. There will be no direct measurement of this item. Silt fence will be incidental to this item and installed as shown on the site plan.

4.2 PAYMENT

B. Partial payments for mobilization/demobilization will be made based on the lump sum bid price as follows:

- 25% of the amount bid for mobilization/demobilization when the Contractor has moved on-site and begun construction activities.
- 50% of the amount bid for mobilization/demobilization when 25% of the contract amount (exclusive mobilization/demobilization) has been completed.
- 75% of the amount bid for mobilization/demobilization when 50% of the contract amount (exclusive mobilization/demobilization) has been completed.
- 100% of the amount bid for mobilization/demobilization when 75% of the contract amount (exclusive mobilization/demobilization) has been completed.

END OF SECTION 01450

SECTION 01750

FINAL CLEANUP

Added Section.

PART 1 GENERAL

1.1 DESCRIPTION

A. This work consists of final cleanup of the project site prior to final acceptance.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.1 CONTRACTOR RESPONSIBILITES

The contractor shall be responsible for final clean up at the end of the project to a level satisfactory to the owner. All construction debris, no mater how small, shall be collected and removed from the site. All wheel ruts shall be filled in and be leveled to match the adjacent grade and material. Re-seeding or re-sodding, or other re-surfacing may be necessary to repair any construction related impacts or damage.

All survey markings, stakes, temporary paint marks, flagging and other devices shall be removed regardless of who installed them. All excess pavement, concrete, gravel, soil, or other construction materials not intended for permanent use shall be removed.

All final slopes shall be dressed manually to remove woody debris, accumulated trash and oversized material. Any new slope or topsoil surfaces shall be hand raked to provide a uniform appearance. The contractor shall dress all gravel, pavement and concrete edges to eliminate abrupt edges and provide a smooth transition. All construction related temporary sediment control devices shall be removed as soon as practical.

PART 4 MEASUREMENT AND PAYMENT

4.1 PAYMENT

Unless specifically noted otherwise, all final cleanup work shall be incidental to other work items in the contract and no separate payment shall be made.

END OF SECTION 01750

SECTION 02230

STREET EXCAVATION, BACKFILL AND COMPACTION

All applicable portions of this specification section in the MPWSS shall apply with the following additions, deletions and/or modifications.

PART 3 EXECUTION

3.1 CLEARING AND GRUBBING

Add the following:

Remove all clearing and grubbing debris off the project site and obey all state, county, and local disposal restrictions and regulations. Existing wood barrier posts shall be removed as shown on the site plan under this contract.

PART 4 MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT AND PAYMENT

Delete this section and add the following:

A. CLEARING AND GRUBBING

1. Miscellaneous clearing and grubbing will not be measured for payment and is considered incidental to other work items in this Contract. Removal and disposal of existing wood barrier posts will be measured and paid as EACH.

B. EXCAVATION AND EMBANKMENT

1. Excavation and embankment will be measured and paid by the lump sum (LPSM).

END OF SECTION 02230

SECTION 02910

SEEDING

All applicable portions of this specification section in the MPWSS shall apply with the following additions, deletions and/or modifications.

PART 1 GENERAL

1.1 DESCRIPTION

Add following:

This work also includes conserving, placing, and finishing topsoil placement at designated areas on the project drawings or as directed by the Landscape Architect.

PART 2 PRODUCTS

2.1 SEED

Add the following:

Utilize the following seed mix for all areas to be seeded.

Seed Name	% Pure Live Seed	Lbs. Per Acre
Western Wheatgrass	30	*
Bluebunch Wheatgrass	20	*
Hard Fescue	20	*
Slender Wheatgrass	15	*
Green Needlegrass	15	*

* Drilled Rate = 25 lbs/acre, Broadcast and Hydroseed Rate = 50 lbs/acre

2.2 TOPSOIL

Add the following:

Utilize all salvaged topsoil conserved from clearing and grubbing operations to cover excavation and embankment slopes prior to seeding or mulching.

2.4 FERTILIZER

Delete this Section.

PART 4 MEASUREMENT AND PAYMENT

4.1 GENERAL

Delete this section and add the following:

A. Seeding will be measured and paid by the lump sum (LPSM) including all labor, equipment, materials and incidentals required for the completion of the work.

B. Placing conserved topsoil will not be measured for payment and is considered incidental to other work items in this Contract.

END OF SECTION 02910

SECTION 02940

SIGNING

Added Section.

PART 1 GENERAL

1.1 DESCRIPTION

A. This work consists of furnishing and placement and/or removal and reset of signs and sign posts at designated areas on the project drawings or as directed by the Landscape Architect. This work also consists of the mounting and complete installation of FWP supplied signing at designated areas on the project drawings or as directed by the Landscape Architect.

PART 2 PRODUCTS

2.1 WOOD POSTS

A. Furnish posts from dry no. 1 grade Douglas fir, southern or Ponderosa pine, hemlock, spruce, or western larch conforming to AASHTO M 168. Treat the posts with water-borne preservative ACA, ACZA, or CCA according to AWPA Standard C14 except the minimum preservative retention is 0.40 pounds per cubic foot.

2.2 HARDWARE

A. Furnish galvanized steel or aluminum alloy material for lag screws, washers, clip angles, wood screws, shear plates, U-bolts, clamps, bolts, nuts, and other fasteners.

PART 3 EXECUTION

3.1 GENERAL

A. Sign locations may be changed to fit field conditions as approved by the Landscape Architect. Determine sign support lengths measured from the top of the sign to bottom of the footing. Backfill sign supports and post by tamping with hand tools and/or mechanical equipment. Install sign supports according to the project drawings or as directed by the Landscape Architect.

PART 4 MEASUREMENT AND PAYMENT

4.1 PAYMENT

A. Sign post and panel installation (FWP supplied sign panels) will be measured and paid for by the each (EACH).

END OF SECTION 02940

SECTION 03321

CONCRETE WHEEL STOPS

Added Section.

PART 1 GENERAL

1.1 DESCRIPTION

A. This work consists of furnishing and placement of concrete wheel stops at designated areas on the project drawings or as directed by the Landscape Architect.

PART 2 PRODUCTS

1.1 WHEEL STOPS

A. Furnish pre-fabricated concrete wheel stops (72” min. length) as designated on the project drawings or as directed by the Landscape Architect.

PART 3 EXECUTION

3.1 GENERAL

A. Install concrete wheel stops at locations as designated on the project drawings or as directed by the Landscape Architect. Furnish and place No. 5 rebar measuring 3 feet in length to hold stops in place. Drive rebar flush with the top of each concrete wheel stop.

PART 4 MEASUREMENT AND PAYMENT

4.1 PAYMENT

A. Wheel stops will be measured and paid for by the each (EACH).

END OF SECTION 03321

SECTION 99998

WOOD POST AND STEEL CABLE BARRIERS

Added Section.

PART 1 GENERAL

1.1 DESCRIPTION

A. This work consists of transporting and installing repurposed treated wood guardrail posts (provided by owner) and steel barrier cable and incidentals to the lines and grades as designated in the project drawings and specifications or as directed by the Landscape Architect.

PART 2 PRODUCTS

2.1 REPURPOSED WOOD POSTS

A. Repurposed treated wood or concrete barrier posts to be furnished by owner. Owner is responsible for transportation to project site. Contact Duke Short, FWP Region 4 FAS Maintenance Supervisor at (406) 454-5856 a minimum of 5 days prior to anticipated pickup time to coordinate delivery.
B. Wood posts which exhibit signs of excessive decay or cracking shall be brought to the attention of the Landscape Architect and shall not be installed.

2.2 CABLE

A. Furnish 5/16” minimum galvanized aircraft cable.

2.2 HARDWARE

A. Furnish (2) galvanized cable clamps at each end of cable.

PART 3 EXECUTION

3.1 INSTALLATION

A. Embed all posts at a spacing of 10’ O.C. and at a minimum depth of 2 feet. Assure posts are plumb and are of equal height (approximately 3’). Assure pre-drilled holes are aligned properly for continuous cable installation.

B. Secure galvanized aircraft cable to posts through pre-drilled holes. Ensure cable is tight and with minimum deflection but not so tight as to pull posts from plumb orientation. Secure each end with loop around last post and (2) minimum galvanized cable clamps.

PART 4 MEASUREMENT AND PAYMENT

4.1 MEASUREMENT AND PAYMENT

A. Posts w/galvanized aircraft cable will be measured and paid by the number of posts placed (EACH) including all labor, equipment, materials and incidentals required for the completion of the work.

END OF SECTION 99998